DISSERTATION

THE IMPACT OF ADHERING TO MASCULINE NORMS ON THE RELATIONSHIP BETWEEN JOB SATISFACTION AND LIFE SATISFACTION

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ABSTRACT

THE IMPACT OF ADHERING TO MASCULINE NORMS ON THE RELATIONSHIP BETWEEN JOB SATISFACTION AND LIFE SATISFACTION

Job satisfaction (JS) has been shown to significantly predict life satisfaction (LS) across a large array of research (Tait, Padgett, & Baldwin, 1989), though the strength of the relationship varies (Steiner & Truxillo, 1987). Authors have suggested the difference in the strength of the relationship across studies may be due to the presence of moderators (Rain, Lane, & Steiner, 1991), particularly an individual's level of work importance (Lent & Brown, 2008). Unfortunately, the research on the moderating impact of work importance uses measures which lack sufficient validity and reliability evidence about their scores (Steiner & Truxillo, 1987). Steiner and Truxillo (1987) suggested Kanungo's (1982) Work Importance Questionnaire and Job Importance Questionnaire as a specific measure which would address this concern, though adherence to traditional masculine norms may also tap into the construct of work importance. Individuals who adhere to traditional masculine norms of the dominant culture in the U.S. often place even greater emphasis on their work role (Mahalik et al., 2003). The past literature on adherence to masculine norms has generally focused solely on negative outcomes (Kiselica & Englar-Carlson, 2010) and often samples including only mainly White, heterosexual men (Parent & Smiler, 2012).

The current study explores the impact of potential moderators on the relationship between job and life satisfaction, examines how this relationship may vary across categories of identity, evaluates potential positive outcomes of adherence to masculine norms, and analyzes how

adherence to masculine norms may vary across categories of identity. An online survey was given to 290 U.S. adults, working at least part time, about job satisfaction, life satisfaction, positive and negative affect, job and work importance, and adherence to masculine norms. The results showed job satisfaction to predict life satisfaction, though did not find any significant moderating effect of any measure of work importance (work importance, job importance, primacy of work). The model explaining the largest amount of variance (45%) suggested that job satisfaction may have an indirect effect on life satisfaction, through positive and negative affect. The above results did not vary by gender (job satisfaction predicting life satisfaction, no significant moderators, mediation model). With regard to adherence to masculine norms, there were no relationship detected between positive outcomes and adherence. While the current sample did not have sufficient numbers to examine how adherence to masculine norms may vary by ethnicity and sexual orientation, differences between men and women were examined. Men showed significantly higher adherence to masculine norms, as well as higher adherence to specific norms of power over women, the use of violence, and frequently changing sexual partners. The results suggest the need for more complex models and statistical methods, using outside raters, selecting methods that can test causality, and intentionally selecting higher numbers of ethnic and sexual minorities. With regard to clinical implications, the study suggests the need to address values around help-seeking, focusing on strengths for adherence to masculine norms, and addressing barriers within therapy and barriers towards entering therapy for individuals with high self-reliance.

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Introduction

Work is an important part of life for most adults (Lent & Brown, 2008) and the search for work satisfaction is a driving force for job search websites, career counseling, and for individuals seeking higher education. In addition to pursuing work satisfaction for its own sake, being satisfied with work also has important impacts on emotional well-being, physical health, psychological health (Fritzsche & Parrish, 2005), and satisfaction with life as a whole (Rain et al., 1991). Researchers have suggested that different variables may strengthen the relationship between job satisfaction and life satisfaction, such as the importance of the work role (Lent & Brown, 2008). In particular, men who adhere to traditional masculine norms of the dominant culture in the U.S. often place even greater emphasis on their work role (Mahalik et al., 2003). Some authors have suggested that work is an essential component of a man's identity (Hancock, 2012). To date, there has been relatively little literature examining whether a greater emphasis on the work role would impact the relationship between job and life satisfaction. It is possible that adhering to traditional masculine norms, such as viewing work as the primary role in life, could potentially strengthen the relationship between job and life satisfaction. If so, this would show a positive impact of adhering to traditional masculine norms. The previous psychological literature on masculinity has typically focused on the detrimental outcomes of masculinity on boys and men (Kiselica & Englar-Carlson, 2010). This has left the positive impacts of adhering to masculine norms comparatively unexamined, while also often overlooking the impact of masculine norms in the lives of women. Both men and women may identify with these masculine norms (Parent & Smiler, 2012), but previous research has focused solely on single sex samples, and most often among White, heterosexual men in particular.

The current study examines the impact of adhering to masculine norms (work importance) on the relationship between job and life satisfaction, investigates benefits of adhering to traditional masculine norms, explores how adherence to masculine norms may be similar or differ across other identity categories (gender, ethnicity, and sexual orientation), and examines how the relationship between job and life satisfaction may be similar or different across ethnicity, gender, and sexual orientation. Understanding these relationships could help to inform possible future clinical interventions for psychologists and career counselors regarding adhering to masculine norms and job satisfaction, provide greater awareness of the outcomes of adhering to masculine norms, encourage conversations about how the norms look similar or different across other identity categories, and raise awareness of possible strengths for individuals adhering to masculine norms.

Literature Review

Job and Life Satisfaction

Job satisfaction. Job satisfaction is thought of most simply as the extent to which people enjoy their jobs (Fritzsche & Parrish, 2005). While some have argued that the concepts of job satisfaction and work satisfaction are different (Kanungo, 1982), others use the terms interchangeably (Weiss, Dawis, England, & Lofquist, 1967). This leads the current study to use the terms "job satisfaction" and "work satisfaction" synonymously. Job satisfaction has been studied both in terms of global satisfaction, such as with the Job in General scale (Ironson, Smith, Brannick, Gibson, & Paul, 1989), as well as more specific components or facets of job satisfaction, such as the rewards of work, the context and the people. Examples of instruments that measure job satisfaction using a component approach include the Job Descriptive Index (Smith, Kendall, & Hulin, 1969) and the Minnesota Satisfaction Questionnaire (Weiss et al., 1967). One of the most comprehensive models of job satisfaction comes from Social Cognitive Career Theory (SCCT-Lent, Brown, & Hackett, 1994).

SCCT was originally designed as a theoretical basis for understanding interest, development, and choice in educational and vocational domains. Lent and Brown (2006) used this theory as a basis for a model of work satisfaction that is made up of five main components that have been well supported in research. The five components will be briefly outlined here then explained in greater depth. The five components of Lent and Brown's (2006) model of work satisfaction are (1) personality and affective traits, (2) participation in goals (or progress towards specific goals), (3) self-efficacy beliefs, (4) work conditions, and (5) barriers/supports related to goal pursuits and self-efficacy beliefs.

(1) With regard to personality and affective traits, a meta-analysis of 27 studies found a relationship of r = .49 between general positive affectivity traits and work satisfaction (Connolly & Viswesvaran, 2000). Another meta-analysis of 79 studies found a correlation of r = .34 (Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003). (2) This model also theorizes that satisfaction is determined by cognitive processes, including goal-directed behavior. Other research has found goal directed behavior to relate moderately to strongly with work satisfaction in the U.S.(Wiese & Freund, 2005), work satisfaction in Germany (Maier & Brunstein, 2001), and with academic satisfaction among U.S. college students (Lent et al., 2005). (3) The third component of this model relates to self-efficacy beliefs, in other words, an individual's confidence in her or his ability to successfully complete particular tasks in a specific domain. Judge and Bono (2001) found the relationship across 12 studies between self-efficacy and job satisfaction to be r = .38. (4) The fourth component of work conditions has been broken down into person environment fit and organizational support. With regard to person-environment fit, this has been conceptualized as fit between needs of an organization and the supplies, as well as fit between the person and environment. Both of these were found to correlate strongly with work satisfaction (range from r = .44 to r = .61). With regard to organizational support, a meta-analysis of 21 studies found a correlation between perceived organizational support and job satisfaction of r = .59.

(5) Lent and Brown (2006) note that the final component of their model (barriers towards self-efficacy) contains the least research evidence of the model. While this idea may not yet have strong support overall, there is evidence that individuals from marginalized groups may face additional barriers towards self-efficacy and work goals. At the individual level, discriminatory attitudes towards specific groups may create barriers towards self-efficacy. One

example would be the belief that women are worse at math than men, which is often internalized in ways that lowers math self-efficacy for women (Boysen, 2013). There may also be societal and structural barriers towards self-efficacy, such as inequality in education resources through racially segregated schools (Storer et al., 2012). Storer noted how students in lower performing schools have a higher likelihood than White students in suburban districts to face crime and violence, be taught by less experienced teachers, and have less access to resources to prepare for college. This underscores the importance to explore how job satisfaction may vary by gender and ethnicity. While there has been relatively little research exploring the impact of identifying with marginalized groups on job satisfaction, life satisfaction has been more thoroughly examined.

Life satisfaction. Life satisfaction is thought of most simply as "the good life" (Pavot & Diener, 1993). The idea of what makes "the good life" has been studied in terms of concrete outcomes such as health or successful relationships, but Pavot and Diener (1993) suggested subjective and global methods of measurement could be more useful. They noted it may be more valuable to view satisfaction with life from an individual's perspective, as each person may have differing values on what is the good life, how much hardship is normal or acceptable, and cognitive evaluations of what struggle and success means from her/his culture. Pavot and Diener continued that measuring life satisfaction through specific domains taps into more immediate factors, while global life satisfaction shows more stable results over time (for longitudinal evidence, see Pavot and Diener, 2008). Other authors have suggested that fluctuations in mood/temperament and/or general trait levels of positive and negative affect may influence ratings (Lent et al., 2005; Pavot & Diener, 2008). Research regarding life satisfaction has been conducted cross-culturally, from emerging adults to older adults, among both inpatient and

outpatient therapy clients, and even among prison inmates. There have been a variety of positive outcomes related to the construct of life satisfaction. For example, global satisfaction with life has been found to predict decreased suicide risk (Koivumaa-Honkanen et al., 2001), better physical health, and increase life expectancy (Lyubomirsky, King, & Diener, 2005). There is also broad array of studies that have also shown that (JS) job satisfaction is also strongly related to (LS) life satisfaction (often referred to as the JSLS relationship; Rain et al., 1991).

JSLS relationship. Across many studies, the weight of the evidence suggests that individuals who are satisfied with their job are more likely to be satisfied with life (Judge & Watanabe, 1993; Rain, Lane, & Steiner, 1991; Rice, Near, & Hunt, 1980; Tait, Padgett, & Baldwin, 1989). A study by Rice, Near, and Hunt (1980) reviewed 23 studies and found positive relationships between job satisfaction and life satisfaction for 90% of included studies. These authors pointed to methodological problems to explain the remaining studies which found a negative JSLS relationship or no JSLS relationship. Meta-analyses on this topic have found similarly positive relationships between job and life satisfaction. A meta-analysis by Tait, Padgett, and Baldwin (1989) examined 34 studies that measured both job satisfaction and life satisfaction and found a correlation of $r = .44$. With regard to gender, these authors found that prior to 1974, the correlation between job and life satisfaction for women was $r = .20$ and $r = .40$ for men. Post 1974, the difference was no longer significantly different. Women showed correlations between job and life satisfaction of $r = .39$, while men showed $r = .37$.

In their comprehensive review, Rain, Lane, and Steiner (1991) found a difference in the strength of the correlation between job satisfaction and life satisfaction for studies before 1980 and studies after 1980. For studies prior to 1980, they found correlations ranging from the upper .20s to the low .30s. For studies after 1980, correlations ranged from $r = .40$ *to* .48. Though

.48 is a relatively large correlation by social science standards, both the authors of the review article (Rain et al., 1991) and the meta-analsyis (Tait, Padgett, and Baldwin, 1989) suggested that further research is needed to better understand these complexities in the relationship between job satisfaction and life satisfaction (JSLS). In their meta-analysis, these authors found that 25% of the difference of results in studies on the JSLS relationship could be accounted for by sampling and measurement error, and suggested that the remaining 75% suggests the presence of moderators of the relationship.

Lent and Brown (2008) suggested that the strength and direction of the JSLS relationship may be altered by an individual's values about the importance of work, especially when work plays a large role in an individual's life. Several authors made similar suggestions that an individual's value about the importance of work may impact this relationship (Bamundo & Kopelman, 1980; Rain et al., 1991; Rice, McFarlin, Hunt, & Near, 1985; Rice et al., 1980; Steiner & Truxillo, 1987, 1989) . There are two published studies which tested this moderator hypothesis (Rice et al., 1985, 1980). The results of these studies suggested job importance did not significantly moderate the relationship between job satisfaction and life satisfaction. Steiner and Truxillo (1987) interpreted the null results to reflect poor measurement rather than valid conclusions about the impact of work importance. They noted that the items measuring work importance in the above studies (Rice et al., 1985, 1980) were not designed from specific theory or examined for reliability of measurement. This makes it difficult to draw any conclusions from the null results. Steiner and Truxillo (1987) suggest the Kanungo (1982) Work Importance Questionnaire (WIQ) and Job Importance Questionnaire (JIQ) would be a better way to measure the construct. The only study to date which has found a significant result showed that while job involvement did not moderate the JSLS relationship, work involvement (which the authors

described as an individual's value of the importance of work) significantly weakened the relationship between job satisfaction and life satisfaction (Moser & Schuler, 2004). The current study aims to examine the impact of work involvement on the JSLS relationship using multiple measures. In addition to Kanungo's WIQ and JIQ (Kanungo, 1982), it is possible that gender role norms regarding the primacy of work may also moderate the JSLS relationship.

Gender and Traditional Masculine Norms

Gender terminology. The current study chooses to use the term gender (versus sex) for a variety of reasons. Previous authors have suggested that gender and sex are distinct terms (Gentile, 1993) and conventions for how they should be defined in psychological literature. Gentile noted how sex has been used to describe a variety of meanings, including sexual intercourse, traits or conditions linked to genetics/sex chromosomes, traits or conditions that are culturally based, traits or conditions linked to both biological and cultural components, and traits or conditions where no claim to causality (typically because no causal relation is known). He defined gender as aspects of being male or female that are based in context, environment, and/or culture. There are specific implications for using either term, based on essentialist and constructionist philosophies.

Essentialists view gender as residing within an individual (Bohan, 1993). This perspective also is likely to view differences as internal, persistent, separate from sociopolitical context, and likely to view differences between men and women from sex. Bohan (1993) further noted that constructionist perspectives view gender as a reflection of expected behaviors under certain contexts. An example is offered to demonstrate how both philosophies would address gender differences. If women showed more friendliness behaviors than men (e.g., smiling, eye contact), an essentialist perspective might view women as inherently more friendly than men.

The essentialist perspective does not necessarily make claims about whether the difference is due to biology or environment, but it is viewed as an inherent part of women's personality. Constructionist perspectives would view friendliness as part of social norms around how women and men should act in certain contexts, and that exposure to contexts that expect/reinforce friendliness by gender creates this difference. Constructionists point to a variety of problems with the essentialist perspective.

Using essentialist positions can lead to negative outcomes including missing contextual/situational elements, justifying inequalities based on status, and putting the focus of change on the individual. There are a number of studies that show gender differences to be caused or impacted by context. Research has demonstrated that women in positions of power are more likely to exhibit "masculine typical" behaviors (Henley, 1977), women will behave in more traditionally feminine ways around men who hold more traditional views on gender (Zanna & Pack, 1975), and individuals are likely to overemphasize permanence of behavior and underemphasize context (Correspondence bias- Gawronski, 2004). Individuals who look at differences through essentialist lenses may view problematic social structures (pay inequality for women, overrepresentation of people of color in prison, evaluations of competence) as inherent and just (Bohan, 1993). This can lead to putting emphasis of change on individuals, such as self-defense classes for women versus exploration of why men rape.

The current study chooses to use the term gender when discussing masculine or feminine behavior. As noted above, using the term "sex" implies that gender differences found between men and women to be persistent, possibly biologically based, and separate from context. There is no measure in the current study of biological or genetic measures that would tell an individual's biological sex. Using the term sex may overlook individuals who identify as gender-

queer or transgendered, by assuming biological and sex and gender identification to be the same construct (for further reference, see Halim et al., 2014). Studies which ask for an individual's sex are likely measuring how participants self-identify their gender identity, which may or may not be congruent with their biological sex. The current study focuses more on impacts of identifying with masculine norms based on how participants identify their gender.

JSLS relationship and gender. Viewing work as central or a primary role may impact the relationship between job and life satisfaction, and may be part of traditional gender norms. Rain, Lane, and Steiner's (1991) meta-analysis found that gender and year of publication of a study were significant moderators in the relationship between work and life satisfaction. These authors reported differences in the strength of the JSLS relationship for men and women for studies conducted prior to 1974, but no difference in studies conducted after 1974. The correlation between work satisfaction and life satisfaction was $r = .20$ for women and $r = .40$ for men that studies conducted before 1974. On the other hand, studies conducted from 1974 to 1981 showed the two variables to be correlated at $r = .37$ for men and $r = .39$ for women. The authors suggested two possible explanations for the differences. They first suggest a more heterogeneous group of women occupy more jobs and management positions than prior to 1974. They also proposed that attitudes about the importance of work to a woman's identity may have changed, strengthening the relationship between job and life satisfaction. This second possibility suggests an individual's adherence to specific gender role norms around work may impact the JSLS relationship.

Adhering to traditional masculine norms often includes placing work as the primary role in life, which could impact the relationship between job and life satisfaction. Previous research has found that the worker/provider role is often a central aspect of a traditional masculine

identity (Axelrod, 2001). This opens the possibility that an individual's identification with traditional masculine norms could affect their personal value of work importance, and thus moderate the relationship between job and life satisfaction. If true, this would suggest that adherence to masculine norms could be both harmful and beneficial depending on context.

Adhering to masculine norms may have different impacts on life satisfaction depending on context. Fitting with research suggesting negative consequences associated with conformity to traditional masculine norms (O'Neil, 2010), it is plausible that individuals who identify with traditional masculine norms may face greater declines in life satisfaction when work is not satisfying. Viewing their work as the most important role (or one of the most important) may increase the negative impact of low work satisfaction. In this case, individuals with lower levels of adherence to masculine norms may be protected against decreases in life satisfaction when work satisfaction is low. If adhering to masculine norms around the importance of work does strengthen the JSLS relationship, adherence to masculine norms could be beneficial when work is satisfying. Individuals who do not adhere as strongly to masculine norms around work importance may not receive as large of increases in life satisfaction when work is satisfying. This would help advance the literature explaining how adherence to traditional masculine gender norms could lead to positive outcomes.

Positive masculinity. Much of the literature on traditional masculinity comes from frameworks (see Levant & Pollack, 1995) focusing on detrimental impacts of adhering to restrictive forms of masculinity (Kiselica & Englar-Carlson, 2010). Kiselica and Englar-Carlson (2010) suggested masculinity research should follow the growing focus in other domains of psychological research on strengths over disease, weakness, and damage. They noted the importance of not only examining negative aspects of traditional masculinity, but examining

aspects such as male relational styles, male ways of caring, generative fatherhood, and male self-reliance. Furthermore, they suggest that adhering to masculine norms may only be problematic when rigidly adhered to (Englar-Carlson & Kiselica, 2013). Unfortunately, the current literature focuses much more heavily on why adherence to traditional masculine norms is problematic.

A recent review of research showed identification with traditional masculine gender role norms (Mahalik et al., 2003) to be significantly related to a number of negative outcomes. A sample of these include lower levels of preventative health screenings, lower help-seeking behaviors, getting into physical fights, difficulty managing anger, risk taking behavior, self-esteem, higher levels of psychological distress, binge drinking, alcohol use, marijuana use, and relationship dissatisfaction (O'Neil, 2010). Despite this, there is growing evidence that adherence to traditional masculine norms can be beneficial.

Hammer and Good (2010) noted that there is a large body of evidence discussing the "dark side" of adhering to traditional, Western conceptualizations of masculine norms (see O'Neil, 2008) that has typically ignored strengths and benefits of adhering to these norms. There is growing evidence that strength focused approaches have a number of positive benefits. Building upon strengths in general has been found to counter disorders, inoculate against future disorders, and increase present subjective well-being (Duckworth, Steen, & Seligman, 2005; Gable & Haidt, 2005). There may also be clinical benefits to using a strengths focus regarding masculinity. Hammer and Good (2010) showed that men who adhere to traditional masculine norms often already have negative attitudes towards help-seeking. The authors continue that emphasis on dark sides of masculinity may add further reluctance towards going to therapy. Other authors noted that building upon strengths may resonate better with more traditional men than emotion-focused, symptom alleviation approaches (Mankowski, Maton, Burke, Hoover, &

Anderson, 2000). These criticisms have led a growing number of authors to suggest specific benefits of adhering to traditional masculine norms.

Following the call to recognize strengths, authors have started to explore specific benefits of adhering to traditional masculine norms. Levant (1992) noted how the masculine norms of risk-taking involves self-sacrifice, setting aside one's own needs, and the ability to withstand hardship and pain for others. In addition, he described how "dominance" norms can contribute to the ability to be assertive when necessary, and acting rational or calm in the face of danger. Kiselica, Englar-Carlson, Horne, and Fisher (2008) pointed out that adhering to traditional masculine norms can lead to heroism, healthy self-reliance, daring, and courage. Similarly, O'Neil (2008) suggested that traditional masculinity can be linked to responsibility, courage, altruism, resiliency, and acts of service (in showing care for others through action). Taken with the evidence presented above, this suggests that adhering to traditional masculine norms can have both negative and positive consequences. Two possibilities in understanding the difference in results include context and flexibility of application.

Some authors explain that additional factors may help explain why adherence to traditional masculine norms is linked with both positive and negative outcomes. Context may be one factor that alters the impact. Men have been shown to express gender in different ways across social and cultural contexts (Liu, 2005). For instance, there may be more permission to show vulnerability with a spouse in a one-on-one setting than in group or work contexts. Another possibility is flexibility of applying norms, which may be more important than adherence to the norms themselves. Several researchers have suggested that inflexibility in adherence to traditional norms and reluctance to engage in behaviors outside the norms (e.g. help-seeking, interdependence) may explain the differences in outcomes related to adherence to

traditional masculine norms (Englar-Carlson & Kiselica, 2013; Kiselica et al., 2008; Wade, 2008; Wester & Lyubelsky, 2005). With regard to the focus of the current study, it is possible that adherence to traditional masculine norms could result in different outcomes depending on context. It is also possible that adhering to traditional norms could be beneficial if relationship between job satisfaction and life satisfaction is strengthened. Though there has been much research exploring outcomes of adherence to traditional masculine norms among white, heterosexual men, there has been relatively little exploring these norms across other groups (e.g., women, men of color, sexual minority men).

Women and masculine norms. Addis, Mansfield, and Syzdek (2010) cautioned that examining conformity to masculine norms only in men may inadvertently promote essentialist viewpoints which ignore the temporal, cultural, and contextual aspects of gender norms. In particular, these approaches may falsely suggest a perfect relationship between sex and gender identity. Parent and Smiler (2012) continued that both men and women may identify with traditional masculine norms, though previous research has often relied solely on single gender samples. They stated concern that this pattern has led to a lack of knowledge around the implications of women's identification with masculine norms (such as importance of the work role) and information about gender similarities. It is possible that research about norms around work importance could moderate the relationship between job and life satisfaction for women, in line with Tait et al. (1989). Thus, it is important to examine how negative outcomes of traditionally masculine norms are similar and different for men and women.

There have been a few recent studies exploring the use of measures of masculine norms among women. In a study examining psychometric properties of scores on the Conformity to Masculine Norms Inventory (CMNI- 46), Parent and Smiler (2012) found internal consistency

estimates of $\alpha > .70$ in all but the "power over women" subscale. They noted the scale operated similarly for men and women, though each group endorsed items at differing levels. Said differently, this suggests that men and women define the construct of masculinity similarly, though enact these norms at different levels. Another study using the CMNI with women found adherence to certain norms to be beneficial. In a study of female athletes, Steinfeldt, Zakrajsek, Carter, and Steinfeldt, (2011) found the risk-taking subscale linked to higher levels of body esteem. This study also showed internal consistency estimates of $\alpha > .70$ for scores on all subscales, except the "power over women" subscale ($\alpha = .49$). A study by Smiler (2006), found that high scores on the CMNI was linked to sexism for both male and female participants. This study also showed no difference in scores on pursuit of status or primacy of work subscales, across undergraduate adults, non-undergraduate adults aged 18-29, non-undergraduates aged 30-49, and non-undergraduate adults aged 50-81. This information is congruent with the gender similarities hypothesis, (Hyde, 2005) where differences between men and women are most likely to be in the small effect size. It is possible that higher primacy of work scores will strengthen the relationship between job and life satisfaction for women, similar to male participants. It is further possible, based on the literature described above, that women will different in their mean level of endorsement of norms. In addition to contributing to the masculinity literature about women, the current study aims to explore the impact of adhering to masculine norms among men of color, and sexual minority men.

Ethnicity and masculine norms. Focusing solely on adherence to traditional masculine norms in European-American men marginalizes the experiences of men of color and overlooks how gender role norms may interact with ethnic or cultural norms. A large majority of previous research about masculinity and adherence to masculine norms has focused on European-

American male samples (Liu & Iwamoto, 2007; Liu, 2005; Wester, 2008). Some researchers proposed that the construct of "masculine norms" more accurately reflects dominant, heterosexual, European-American norms, which may play out differently in the lives of men of color (Wester, 2008). For instance, African-American men in the U.S. may face contradicting gender role messages from African-American culture and European-American culture that may make it difficult to live up to either set of expectations. Wester (2008) notes that European-American norms about masculinity may stress non-collaborative economic success and advancement, which may contradict norms of African-American cultures stressing cooperation and collective good. Many African-American men may feel trapped in situations where any decision will inevitably violate one set of norms, with significant consequences either way. There may also be unique challenges when men of color identify with dominant, White masculinity norms. Hispanic-American and African-American men may be socialized to restrict emotional expression (similar to European-American men) in ways that impact reactions to discrimination. This may lead them to feel pressured to show a strong front externally, which may belie their intense confusion when dealing with invisibility and racism. Unfortunately, there has been relatively little research examining the impact of adherence to masculine norms among men of color (Hammer & Good, 2010).

Research evidence about adherence to masculine norms has found some similarities in outcomes between men of color and European-American men, while highlighting some important differences. With regard to African-American men in particular, there has been mixed evidence about whether African-American men adhere to masculine norms at the same levels as European-American men. Some studies have found that African-American men adhere to traditional masculine norms more than European-American men (Levant & Richmond, 2007),

while others found less endorsement of traditional masculine norms (Abreu, Goodyear, Campos, & Newcomb, 2000). Levant, Majors, and Kelley (1998) found that geographic region may moderate the relationship between ethnicity and masculine norm endorsement, especially among African-American men. These authors found that African-American men from the Northeast/Mid-Atlantic region of the US adhered less strongly to traditional masculine norms than African-American men in the South. Despite these differing levels of endorsement, studies have recently begun to explore outcomes of adherence to traditional masculine norms for men of color.

Though there has been relatively little research with the CMNI among men of color, some research has examined masculine norms that overlap with this measure. Caldwell, Antonakos, Tsuchiya, Assari, and De Loney (2013) surveyed 332 African-American fathers (aged 22-63) from mid-western cities, who do not live with their sons (aged 8-12). This study examined relationships between depressive symptoms, drinking behavior, masculinity ideologies, co-parenting behaviors, perceived discrimination, and quality of relationship with their sons. Caldwell and colleagues separated masculine norms into three domains of culturally based masculinity, hegemonic masculinity, and interconnected masculinity. Culturally based masculinity includes elements specific to African-American male definitions of masculinity, including expressing love for family and friends, being a good provider, and being a good parent. Hegemonic masculinity includes elements similar to the self-reliance and power over women subscales of the CMNI. The hegemonic masculinity scale in this study was defined as having power, being physically strong, and being in control of a relationship. Finally, interconnected masculinity was defined as fighting for rights of others, and giving back to the community. With regard to masculinity, the study found culturally based masculinity to be significantly negatively

related to depressive symptoms, and positively related to quality of relationship with sons. Hegemonic masculinity was significantly related to depressive symptoms. Interconnected masculinity was found to be significantly negatively related to depressive symptoms, perceived discrimination, and positively related to quality of relationship with sons. These results suggest similar relationships between adhering to hegemonic masculine norms and increased depressive symptoms for African-American men that have been found among European-American men. It further suggests positive outcomes for adhering to certain masculine norms, including better relationships with sons, fewer mental health symptoms, and lowered experience of discrimination. To date, there has been only one study which has used the CMNI among men of color.

One study has used the CMNI with specific focus on experiences of participants from non-European American identities. Liu and Iwamoto (2007) surveyed 154 Asian-American men (included Chinese-American, Vietnamese, Filipino, Korean, Asian Indian, and Japanese) from a West Coast university about substance use, conformity to traditional masculine norms, and adherence to Asian cultural norms. The results showed significant links between adhering to subscales of the CMNI and substance use. Restrictive emotionality and risk-taking predicted higher overall alcohol use, while the valuing power over women predicted increased binge drinking. The authors noted that it seemed European-American norms (as measured by the CMNI) were more predictive of substance use than identification with Asian cultural values. With regard to the current study, it is possible that men of color will show similar relationships between adhering to masculine norms and outcomes as White men. Similar to the lack of research surrounding men of color, there has been relatively little research examining the impact of adherence to traditional masculine norms amongst sexual minority men.

Sexual orientation and masculine norms. While there has been no research examining impacts of adherence to masculine norms among sexual minority men, it is plausible that adherence to certain norms could lead to unique barriers. One specific norm from the CMNI includes heterosexual self-presentation, where men feel pressure to restrict affection towards other men and externally present signs of attraction towards women. In a review of research on prejudice and mental health among lesbian, gay, and bisexual populations, Meyer (2013) notes that internalized homophobia ("anti-gay attitudes") has been linked to mental health problems and psychological adjustment across the lifespan. Others have also noted how bisexual men may face unique challenges (Wester, 2008). Like other groups of men, bisexual men are often socialized to present themselves as solely sexually attracted to women. They may be able to conform to traditional masculine norms through showing attraction to women, but simultaneously feel pressured to hide any same sex attraction. Furthermore, bisexual men often face the heterosexist belief that since they are attracted to men and women, they should be able to "choose" who they feel attracted to. Others have noted that sexual minority, men of color may have additional experiences of oppression related to cultural norms and masculine norms. Being gay may contradict not only masculine norms of opposite-sex attraction, but also cultural expectations of both African-American and Hispanic-American men (Jimenez, 2003; Williams, Wyatt, Resell, Peterson, & Asuan-O'Brien, 2004). With regard to the current study, measures examining traditional masculinity include a subscale regarding heterosexual self-presentation. It is possible that higher scores on heterosexual self-presentation for sexual minority men will predict lower levels of life satisfaction.

Aims of The Present Study

The present study aims to provide relevant information about the relationship between job satisfaction and life satisfaction, work importance, adherence to masculine norms, and intersections with other identity categories (sex, ethnicity, and sexual orientation). The first aim of the current study is to provide a replication of studies on the relationship between job satisfaction and life satisfaction, then follow recommendations by Rain et al. (1991) to examine potential moderators in the relationship. One potential moderator is the importance of work, which will be measured both by the Kanungo (1982) Work Importance Questionnaire and the Mahalik et al (2003) CMNI Primacy of Work subscale. These scales address Steiner and Truxillo's (1987) concerns to measure the impact of work importance with valid and reliable instruments. The second aim of the study is to examine positive outcomes of adhering to traditional masculine norms. This serves to address oft-cited concerns (Kiselica & Englar-Carlson, 2010) that research on men and masculinity has only examined negative outcomes connected with adherence to traditional masculine norms.

The third aim of the study is to explore how the relationship between job and life satisfaction may differ by gender, ethnicity, and sexual orientation. The fourth and final aim of the study is to explore the extent to which adherence to traditional masculine norms may differ by gender, ethnicity, and sexual orientation. This serves to address numerous concerns that research on masculinity has disproportionately studied included White, heterosexual, and male participants (Smiler, 2006; Wade, 2008; Wester, 2008). This leads to the following hypotheses.

Hypotheses

As noted above, the first aim of this study is to provide additional information about the relationship between job satisfaction and life satisfaction, including an examination of possible

moderators. For Hypothesis 1a, it is expected that job satisfaction will predict life satisfaction, congruent with previous meta-analyses (Rain et al., 1991; Tait et al., 1989). Should this hypothesis find support, the next step is to examine the impact of potential moderators in the JSLS relationship. Accordingly, Hypothesis 1b states that work importance will moderate the relationship between job satisfaction and life satisfaction, such that the relationship will be stronger at high levels of work importance than at low levels. Congruent with previous authors' suggestions that adherence to traditional masculine norms make the work role more important or central to an individual's life (Axelrod, 2001; Locke & Mahalik, 2005), Hypothesis 1c posits that the relative importance a person places on work will moderate the relationship between job satisfaction and life satisfaction, such that the JSLS relationship will be stronger at higher levels of work importance than at low levels. These hypotheses also support the second aim of the study, which is to explore potential positive outcomes of adhering to traditional masculine norms. It is possible that adherence to traditional masculine norms can be beneficial, by increasing life satisfaction when individuals are satisfied with their job.

The third aim of the study is to explore how relationships between job satisfaction and life satisfaction may differ across gender, ethnicity, and sexual orientation. Congruent with Tait, Padgett, and Baldwin's (1989) findings that the JSLS relationship did not vary between men and women post-1974, Hypothesis 2a posits the strength of the relationship between job and life satisfaction will not vary by gender. With regard to other identity variables, nothing in the Social Cognitive Career Theory model (Lent, Brown, & Hackett, 1994) or other research suggests the JSLS relationship would vary by sexual orientation or ethnicity. Therefore, Hypothesis 2b proposes that the strength of the relationship between job satisfaction and life satisfaction will

not vary by sexual orientation; similarly, hypothesis 2c proposes the strength of the relationship between job satisfaction and life satisfaction will not vary by ethnicity.

The fourth aim of the study is to explore the extent to which adherence to traditional masculine norms may differ by gender, ethnicity, and sexual orientation. In line with Smiler (2006), Hypothesis 3a posits that men will show significantly higher overall levels of adherence to traditional masculine norms. Also based on this research, Hypothesis 3b states that men will rate significantly higher on valuing power over women. Following the results of Archer (2004), Hypothesis 3c states that men will more significantly value the use of violence than women. In parallel, following the meta-analysis by Oliver and Hyde (1993), Hypothesis 3d posits that men will show significantly higher value than women on frequent sexual intercourse outside of committed relationships. Also following the results of Oliver and Hyde's (1993) meta-analysis, with multiple partners 3f proposes that men and women will not significantly differ in their value on being perceived as heterosexual. Finally, the current study also aims to explore how CMNI scores may vary by sexual orientation and ethnicity.

In addition to gender, the fourth aim of the study is to explore how adherence to traditional masculine norms may differ across ethnicity and sexual orientation. In line with Wester (2008), Hypothesis 3f states that there will not be significant differences in men's overall adherence to traditional masculine norms across sexual orientation. Based on the same research, it is expected that greater adherence to traditional masculine norms will predict lower levels of life satisfaction for gay and bisexual men (Hypothesis 3g). With regard to ethnicity, similar to Liu and Iwamoto (2007), Hypothesis 3h states that there will be no significant differences in overall adherence to traditional masculine norms across ethnicity.

Methods

Participants

Two hundred ninety U.S. adults, working at least part time, participated in the current study. The current study drew from an online data collection service ("MTURK", see below) to help provide a more diverse and broad sample of participants. Participants were paid $1.00 (U.S.) for their participation, which aligns with the typical compensation rate using this method (Ipeirotis, 2010). The mean age was 33.78 (*SD* = 10.91), with 159 men, 129 women, and 2 gender-queer individuals. With regard to ethnicity, 76.9% self-identified as White/Caucasian, 5.2% as Hispanic/Latino, 7.6% as Asian-American or Pacific Islander, 7.6% as Black/African-American, 2.1% as biracial/multiracial, and .7% as American Indian or Alaska Native. The proportions of each group is roughly similar to 2012 US Census data (77.9%, 16.9%, 5.3%, 13.1%, 2.4%, and 1.2% respectively- United States Census Bureau, 2013). With regard to sexual orientation, 264 individuals identified as heterosexual/straight, 6 identified as lesbian/gay, 16 identified as bisexual, and 1 individual identified as pansexual. Stated differently, 91% of the sample identified as heterosexual and only 9% identified as a sexual minority. With regard to income, the mean income was $52, 713 (*SD* = *$*41,503); when separated by gender, the average for men was $52, 713 (*SD* = $41,503) and the average for women was $ 52, 685 (*SD* = $44, 879). The range in income was $5,000 to $350, 000. When separated by gender, the range was $8, 000 to $350, 000 for men, and $5,000 to $200,000 for women.

Amazon's mechanical turk ("AMT" or "MTURK"). As noted above, participants were drawn from Amazon's Mechanical Turk. AMT is an online crowdsourcing tool where "requesters" can upload specific tasks that individuals sign up to complete for pay (Buhrmester,

Kwang, & Gosling, 2011). A pool of participants are presented with the available jobs and choose which they would like to complete, based on descriptions and wage offered (the average wage is $1.38 per hour or two cents per minute; Ipeirotis, 2010). With regard to behavioral science fields, this tool has been used to seek participants for surveys and experiments. AMT has been shown to provide a large subject pool with greater diversity in ethnicity and age range than found in typical college student samples (Mason & Suri, 2012). In March 2007, there were over 100, 000 individuals using AMT from over 100 countries, though the vast majority come from the United States and India (AMT can only be paid out in U.S. dollars and rupees; Pontin, 2007). In one study, participants from 66 countries responded, with 47% coming from the United States and 34% coming from India (Paolacci, Chandler, & Ipeirotis, 2010). Other researchers conducted five separate studies across three years (Mason & Watts, 2009; Suri & Watts, 2011) and found that participants were 55% female and 45% male (12.5% did not report sex), the median age of participants were 30 years old (mean age 32), and roughly half of participants have an income of $30, 000 per year (the authors noted that this is a participants total income, not just from AMT). The current study would not be well served by college student samples, as college students are presumably not in their career field yet. There is growing evidence that AMT shows similar benefits to "in person" samples, and can overcome some of the concerns noted above.

Previous research has found similar outcomes with AMT and "in person" samples, and better for AMT samples than other types of online samples with regard to study results and completion rates. A previous study using AMT compared a sample of traditional college student from a Midwestern U.S. university, visitors to online discussion boards, and surveys posted to AMT (Paolacci et al., 2010). The AMT sample in the study were older (median age 29) than the

standard in person sample, though similar to the other online sample (median age 26). Additionally, there were similar rates of survey completion for the in person sample and AMT sample (91.6% for AMT, 98.6% for college sample), but a much lower rate of completing the survey for the other online sample (69.3%). Participants in all samples were given decision making tasks that had been conducted previously, finding similar results across samples. In summary, the AMT sample showed to have similar rates of survey completion as in person surveys, greater completion rates than other online samples, a slightly older median age, and similar experimental results on decision making tasks.

It is important to consider a specific area of concern relevant to AMT for choosing participants. Unlike in person surveys, one potential drawback of online surveys given for pay is the possibility of random responding (to finish quickly and get paid), unintentional inconsistent patterns of answers, and software programs ("bots") completing a survey. To address this concern, AMT has created a system where the requester (or experimenter in this case) can reject a response if it does not meet criteria listed for the study. Workers have an overall rating of what percent of their work has been accepted/rejected by requesters and requesters can specify a minimum satisfaction level (the commonly used guideline is 90% acceptance; Mason & Suri, 2012). This helps to prevent intentional poor responding, as well as minimize software bots which would likely not satisfactorily complete these. It is also possible to use validity questions during the survey which can ensure a human is responding (versus bot) and responding attentively. Mason and Suri (2012) used the questions "Who is the president of the United States?" and "What is 2+2?" as validity questions, with only 6 out of 500 responders getting the questions incorrect. Though there may be some concern about the validity of MTURK

responses, there are ways to address them, and they are likely outweighed by the benefits of a more broad and diverse sample than would be found in a college student sample.

Instruments

Predictor variables. The predictor variables include job satisfaction, conformity to masculine norms, work importance, job importance, and affect (positive and negative). Descriptions of each measure is included below.

Job satisfaction. One of the more commonly used measures of individuals' satisfaction with their work is the Minnesota Satisfaction Questionnaire (MSQ; Weiss, Dawis, England, & Lofquist, 1967). The MSQ is a self-report measure consisting of 100 items at a fifth grade reading level that measures work satisfaction in 20 different domains, which can be combined to measure general satisfaction. There is a long form which (updated in 1977) takes roughly 15-20 minutes to complete and a short form consisting of a subset of 20 questions from the original MSQ. The short form of the MSQ measures three specific scales: intrinsic satisfaction, extrinsic satisfaction, and total satisfaction, with responses ranging from very dissatisfied (1) to very satisfied (5). With regard to validity, the MSQ short form total scores showed significant correlations ($r = .59$, $p < .01$) with general questions asking about participants' overall job satisfaction ("how do you feel about your job overall"; Hirschfeld, 2000). Also, confirmatory factor analysis results have shown intrinsic and extrinsic satisfaction scales to be distinct components. With regard to validity, the MSQ manual lists (Weiss et al., 1967) internal consistency estimates ranging from .84 to .91 for scores on the intrinsic satisfaction scale, .77 to .82 for scores on the extrinsic satisfaction scale, and .87 to .92 for scores on the general satisfaction scale. Scores on the general satisfaction scale showed good stability, with test-retest coefficients of .89 across one week and .70 across a one year period. With regard to the current

study, the MSQ total score showed a Cronbach's α value of .91, .85 for the intrinsic subscale, and .83 for the extrinsic subscale.

Adherence to masculine norms. The Conformity to Masculine Norms Inventory-46 (CMNI-46) is a 46 item measure based on the original CMNI, which consisted of 94 items (Mahalik, Talmadge, Locke, & Scott, 2005). The shorter version evaluates conformity to nine masculine norms, including winning (e.g., "In general, I will do anything to win"), emotional control (e.g. "I tend to keep my feelings to myself"), primacy of work (e.g., "my work is the most important part of my life"), risk-taking (e.g., "I frequently put myself in risky situations"), violence (e.g., "sometimes violent action is necessary"), heterosexual self-presentation (e.g., "I would be furious if someone thought I was gay"), playboy ("If I could, I would frequently change sexual partners"), self-reliance (e.g., "I hate asking for help"), and power over women (e.g., "in general, I control the women in my life"). This measure was recently revised in efforts to improve its psychometric properties and utility (Parent & Moradi, 2009, 2011). In particular, two scales which had shown a lack of convergent validity have been removed (Dominance, Pursuit of status; Parent & Moradi, 2011). With regard to validity evidence, Parent and Moradi (2011) showed significant correlations between the CMNI-46 and scores on other similar measures of masculinity, including the Brannon Masculinity scale (BMS; Brannon and Juni, 1984) and Male Role Norms Inventory (MRNI; Levant & Richmond, 2007). Previous studies (Parent & Moradi, 2009) have shown Cronbach's α values for CMNI-46 subscale scores within the good or excellent range (.77 to .91). The current study showed similar results, with Cronbach's α values ranging from .80 to .92 across scores on the eight subscales, and Cronbach's α of .87 for the CMNI total score. (With regard to specific scales, scores on the winning subscale had a Cronbach's α value of .81, .90 for scores on the emotional control subscale, .82

for scores on the risk taking subscale, .88 for scores on the violence subscale, .80 for scores on the power over women subscale, .87 for scores on the playboy subscale, .84 for scores on the self-reliance subscale, .84 for scores on the primacy of work subscale, and .92 for scores on the heterosexual self-presentation subscale).

Work and job importance. The Work Involvement Questionnaire (WIQ) and Job Involvement Questionnaire (JIQ) were developed as a way to measure an individual's value of the importance of work that was conceptually distinct from organizational commitment, intrinsic motivation, work ethic, and psychological identification with work (Kanungo, 1982). This measure was suggested by Steiner and Truxillo (1987) as a psychometrically sound instrument measuring an individual's value of work importance. The JIQ is made up of ten items rated on a 6-point scale from strongly agree to strongly disagree. The scale includes eight positively worded items ("The most important things that happen to me involve my present job," "I am very much involved personally in my job," "I live, eat and breathe my job," "Most of my interests are centered around my job," "I have very strong ties with my present job which would be very difficult to break," "Most of my personal life goals are job-oriented," "I consider my job to be very central to my existence," and "I like to be absorbed in my job most of the time") and two negatively worded items ("to me, my job is only a small part of who I am" and "usually, I feel detached from my job"). Kanungo defines a job and work as separate construct; by this definition, a job is a current, specific position, while work is the general idea of paid employment. The WIQ is made up of five positively worded items ("the most important things that happen in life involve work," "work is something people should get involved in most of the time," "work should be considered central to my life," "in my view, an individual's personal life goals should be work oriented," and "life is only worth living when people get absorbed in

work.") and one negatively worded item ("work should only be a small part of one's life"). JIQ scores show internal consistency estimates of .87, with .75 for WIQ scores. Across a 3-week period, the test-retest correlation was .85 for JIQ scores and .67 for WIQ scores. With regard to validity, JIQ scores had a correlation of $r = .80$ with similar measures and the WIQ scores showed a correlation of $r = .69$. The current study showed Cronbach's α values of .86 for WIQ scores and .90 for the JIQ scores.

Positive and negative affect. In their meta-analysis, Rain et al. (1991) noted that an individual's disposition could be another factor which could impact the relationship between job satisfaction and life satisfaction. They continued that individuals could report higher satisfaction with a number of roles in their lives, due to general patterns of positive or negative responses. Based on this, it is important in the current study to use a measure that would allow tests of the JSLS relationship to control for both state and trait levels of positive and negative affect. One commonly used measure is the Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988), which has shown strong validity, reliability, and utility cross-culturally in hundreds of studies. The PANAS is 20-item scale that provides a measure of both positive and negative mood traits and states (Watson et al., 1988). With regard to validity evidence, previous research has supported the two factor structure of having positive and negative scales (Crawford & Henry, 2004). This study also showed negative relationships between scores on the positive affect subscale with scores on measures of depression and anxiety (HADS and DASS), and positive relationships between scores on the negative affect subscale with scores on measures of depression and anxiety. With regard to reliability evidence, internal consistency coefficients range from .86 to .90 for the positive affect scale scores and range from .84 to .87 for the negative affect scale scores, with no significant differences by gender. Across an 8-week time

period, PANAS showed test-retest correlations from .47 - .68 for the positive affect scale scores and from .39 - .71 for the negative affect scale scores. Participants are asked to "indicate to what extent [they] have felt this way" at different time intervals (at the present moment, in general) , rated from 1 to 5 (very slightly or not at all to extremely). In the current study, the PANAS positive affect scale scores showed a Cronbach's α value of .91 and the PANAS negative affect scale scores showed a Cronbach's α value of .90.

Criterion variables. Satisfaction with life is the only criterion variable in the current study, described in greater detail below.

Life satisfaction. The Satisfaction with Life Scale (SWLS- Diener, Emmons, Larsen, & Griffin, 1985) is a five item scale to measure global satisfaction with life that has been tested across a variety of populations, including older adults, prisoners, individuals in inpatient units for alcohol, therapy clients, and college student samples (Pavot & Diener, 1993). Participants rate the statements from 1-7 (strongly disagree to strongly agree), including, "in most ways life is close to my ideal," "the conditions of life are excellent," "I am satisfied with my life," "so far, I have gotten the important things I want in life," and "if I could live my life over, I would change almost nothing" (p. 172). Diener et al. (1985) reported a Cronbach's α value of .87, with a 2 month test-retest stability coefficient of .82. With regard to validity evidence, scores on the measure has been shown to have strong negative correlations ($r = -.72$) with scores on measures of distress, such as the Beck Depression Inventory (Blais, R. J. Vallerand, L. G. Pelletier, & N. M. Briere, 1989). In the current sample, scores on the SWLS scale had a chronbach's alpha of .93.

Control variables. The control variables in the current study include demographic data about participants and a validity scale. These measures will be described in greater depth below.

Demographic data. The current study will include the following demographic variables: ethnicity, age, income, highest level of education (participant), father's highest education, mother's highest level of education, and gender. The demographic information will be collected at the end of the survey to prevent priming responses based on identity. Ethnicity will be coded following the method of Parent and Moradi (2011), including White/Caucasian, Hispanic/Latino, Asian American/Pacific Islander, African American/Black, Biracial/Multiracial, Arab American/Middle Eastern, American Indian/Native American/Alaska Native, and "other- please describe." Age will be entered as a discrete variable (specific number). Income will be measured by "what do you think your total income was last year for yourself and your immediate family before taxes?". Highest level of education, father's highest education, and mother's highest education will be coded as "I don't know," "6 years or less," "some high school," "completed high school or high school equivalent," "some college," "completed college," "some graduate or professional school," or "completed graduate or professional school." Gender will be coded as male, female, queer/androgynous, and "other (please specify)". Sexual orientation will be coded as heterosexual, lesbian/gay, bisexual, and "other (please specify)".

Validity questions. Following the recommendations by Mason and Suri (2012), the current study used four validity questions to that responses were obtained by actual human respondents versus bots and that participants responded in a careful and effortful manner. The current study used the following questions recommended by Mason and Suri (2012), including "Who is the president of the United States?" and "What is 2+2?" In addition, the study asked

participants to "Please select strongly disagree" and "Please select strongly agree" on two questions interspersed throughout the survey.

Results

Missing Data Analysis

Regression imputation was used to account for missing data. According to this method, a missing item will be replaced with a predicted value by regressing the missing item on all other items for participants who have no missing data (McDonald, Thurston, & Nelson, 2000; Roth, Switzer, & Switzer, 1999). McDonald, Thurston, and Nelson's (2000) comparison of various methods for dealing with missing data suggest that this regression imputation may be the preferred method as it uses information across both items and observations. Though viewed as a surmountable flaw to this method, an important drawback of regression imputation is that it may create artificial homogeneity of results, resulting in artificially higher regression coefficients that may not reflect the true variability in the sample, or population at large. The data from two additional participants was removed from the analyses based on responses to the validity questions (incorrectly answered all 4 items described above).

Transforming Variables and Data Preparation

Non-standardized means, standard deviations, (table 1) and correlations (tables 2, 3 and 4) among the variables are presented below. To test for assumptions of normality, visual inspections were conducted of histograms for each variable. Additionally, skewness and kurtosis values were examined and found to be within acceptable limits (between -1 and +1) for job satisfaction, life satisfaction, work importance, job importance, overall adherence to masculine norms, and each masculine norm subscale. Following recommendations by Tabachnick and Fidell (2001) for moderately skewed data, negative affect and age were transformed using a natural log function. After transforming, age had a kurtosis value of -.58 and a skewness value

of .42; negative affect had a kurtosis value of -.39 and a skewness value of .5. Visual inspection of a histogram of the variables also confirmed that the transformation resulted in a normal distribution. Income was first transformed using a natural log function, but resulted in greater deviations from normality. A square root function was then selected, resulting in a kurtosis value of .98 and a skewness value of .8. With regard to gender, there were only two individuals identifying as gender queer, leading all analyses about gender to only examine men and women. With regard to sexual orientation, there were 264 individuals identifying as heterosexual/straight and 23 identifying as sexual minorities (see above for more information) to test Hypothesis 3f or 3g. Sexual orientation was only used as a control variable in the models. With regard to ethnicity, there were 223 individuals who identified as White/Caucasian, 15 identified as Hispanic/Latino, 22 as Asian-American/Pacific Islander, 22 as Black/African American, 6 as Biracial/Multiracial, and 2 as American Indian/Alaska Native. This provided insufficient numbers to test Hypothesis 3h, though ethnicity was used as a control variable in the models. The only possible analysis across ethnicity would be White versus Person of Color. As described above, individuals from each ethnic group may have specific gender norms for their group (e.g., Black Masculinity-Wester, 2008). This would make combining across ethnicities problematic.

Table 1

Non-transformed Means and Standard Deviations for All Measures

	Gender Combined		Men		Women	
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*
CMNI(T)	101.14	13.65	106.63	12.39	94.59	12.00
CMNI-R	10.58	2.70	11.22	2.52	9.83	2.72
CMNI-Pr	6.51	2.04	6.63	2.08	6.35	2.00
CMNI-W	14.30	3.47	15.05	3.52	13.38	3.19
CMNI-E	15.03	3.67	15.59	3.45	14.40	3.83
CMNI-V	14.46	3.87	15.49	3.72	13.11	3.56
CMNI-Po	7.31	2.24	7.94	2.14	6.57	2.12
CMNI-Pl	8.38	3.06	9.49	2.92	6.95	2.62
CMNI-S	12.09	2.89	12.11	2.95	12.04	2.83
CMNI-H	13.25	4.62	13.78	4.16	12.70	5.04
PANAS-P	35.40	8.43	35.61	8.12	35.24	8.80
PANAS-N	15.93	6.22	15.81	6.39	16.07	6.05
MSQ(T)	71.97	12.11	71.54	11.95	72.54	12.41
MSQ-I	44.09	7.31	43.48	7.32	44.93	7.28
MSQ-E	20.10	4.80	20.29	4.63	19.82	5.03
WIQ	16.45	5.53	16.86	5.63	15.94	5.36
JIQ	30.37	9.42	30.37	9.43	30.36	9.48
SWLS	20.20	7.94	20.36	7.82	20.02	8.09
Age	33.78	10.91	31.94	9.78	36.22	11.78
Income	$52,713	$41,503	$52,685	$44,879	$52,397	$37,367

CMNI(T)= Conformity to Masculine Norms Inventory (short form), total score, CMNI-R= Risk Taking CMNI Subscale, CMNI-Pr= Primacy of Work CMNI Subscale, CMNI-W= Winning CMNI Subscale, CMNI-E=Emotional Control CMNI Subscale, CMNI-V= Violence CMNI Subscale, CMNI-Po= Power over Women CMNI Subscale, CMNI-Pl= Playboy CMNI Subscale, Self-Reliance CMN I Subscale, CMNI-H= Heterosexual Self-Presentation CMNI Subscale, PANAS-P= Positive and Negative Affect Scale (Positive Affect score); PANAS-N= Positive and Negative Affect Scale (Negative Affect Score), MSQ(T)= Minnesota Satisfaction Questionnaire Total Score, MSQ-I= Minnesota Satisfaction Questionnaire (Intrinsic Subscale), MSQ-E= Minnesota Satisfaction Questionnaire (Extrinsic Subscale), WIQ= Work Importance Questionnaire, JIQ= Job Importance Questionnaire, SWLS= Satisfaction with Life Scale

Table 2

Intercorrelations for All Measures (Non-transformed)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1) CMNI(T)	---																
2) CMNI-R	.41**	---															
3) CMNI-Pr	.24**	.20**	---														
4) CMNI-W	.63**	.18**	.14*	---													
5) CMNI-E	.46**	-.03	.01	.11	---												
6) CMNI-V	.59**	.20**	-.05	.33**	.11	---											
7) CMNI-Po	.65**	.26**	.18**	.40**	.15	.30**	---										
8) CMNI-Pl	.34**	.34**	.04	.10	-.03	.21**	.16**	---									
9) CMNI-S	.37**	-.09	-.04	.15*	.38**	.10	.10	-.06	---								
10) CMNI-H	.51**	-.08	.04	.30**	.13*	.18**	.42**	-.17**	.12*	---							
11) PANAS-P	.07	.20**	.21**	.21**	-.15*	-.06	-.03	-.03	-.20**	.14*	---						
12) PANAS-N	.08	.04	.01	.04	.01	-.01	.10	.10	.20**	-.01	-.23**	---					
13) MSQ(T)	-.11	-.05	.29**	.01	-.13*	-.12*	-.10	-.15**	-.21**	-.01	.34**	-.30**	---				
14) MSQ-I	-.14*	-.07	.25**	-.03	-.12*	.16**	-.14*	-.17**	-.15**	.01	.34**	-.29**	.93**	---			
15) MSQ-E	-.02	-.01	.29**	.06	-.09	-.06	.02	-.09	-.23**	.01	.27**	-.26**	.86**	.64**	---		
16) WIQ	.18	.13*	.72**	.09	.06	-.13*	.26**	-.01	-.01	.06	.10	.05	.32**	.28**	.52**	---	
17) JIQ	.10	.07	.67**	.04	.03	-.12*	.10	-.10	-.05	.04	.22**	-.03	.55**	.52**	.47**	.77*	---
18) SWLS	-.01	.08	.15**	.03	-.11	.01	.09	-.16**	-.18**	.07	.49**	-.45**	.42**	.40**	.37**	.18**	.26**

*=$p < .05$, **= $p < .01$

CMNI(T)= Conformity to Masculine Norms Inventory (short form), total score, CMNI-R= Risk Taking CMNI Subscale, CMNI-Pr= Primacy of Work CMNI Subscale, CMNI-W= Winning CMNI Subscale, CMNI-E=Emotional Control CMNI Subscale, CMNI-V= Violence CMNI Subscale, CMNI-Po= Power over Women CMNI Subscale, CMNI-Pl= Playboy CMNI Subscale, Self-Reliance CMN I Subscale, CMNI-H= Heterosexual Self-Presentation CMNI Subscale, PANAS-P= Positive and Negative Affect Scale (Positive Affect score); PANAS-N= Positive and Negative Affect Scale (Negative Affect Score), MSQ(T)= Minnesota Satisfaction Questionnaire Total Score, MSQ-I= Minnesota Satisfaction Questionnaire (Intrinsic Subscale), MSQ-E= Minnesota Satisfaction Questionnaire (Extrinsic Subscale), WIQ= Work Importance Questionnaire, JIQ= Job Importance Questionnaire, SWLS= Satisfaction with Life Scale

Table 3

Intercorrelations for All Measures (Non-transformed) for Men only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1) CMNI(T)	---																
2) CMNI-R	.36**	---															
3) CMNI-Pr	.24**	.20*	---														
4) CMNI-W	.65**	.05	.13	---													
5) CMNI-E	.39**	-.05	-.01	.11	---												
6) CMNI-V	.47**	.11	-.17*	.29**	.03	---											
7) CMNI-Po	.65**	.15	.18*	.42**	.07	.22**	---										
8) CMNI-Pl	.32**	.25**	-.01	.02	.03	.11	.04	---									
9) CMNI-S	.41**	.04	-.01	.23**	.33**	.01	.18*	.07	---								
10) CMNI-H	.52**	-.03	.10	.34**	.08	.21*	.55**	-.21*	.08	---							
11) PANAS-P	.07	.14	.27**	.22**	.01	-.12	-.07	-.09	-.18*	.18*	---						
12) PANAS-N	.09	.11	.05	.04	-.04	-.05	.13	.15	.19*	-.06	-.16*	---					
13) MSQ(T)	-.03	-.08	.37**	.07	-.09	-.05	-.09	-.16*	-.21*	.07	.38**	-.23**	---				
14) MSQ-I	-.02	-.03	.35**	.05	-.08	-.09	-.10	-.13	-.15	.06	.37**	-.23**	.94**	---			
15) MSQ-E	.01	-.11	.34**	.11	-.09	-.01	-.01	-.14	-.26**	.05	.33**	-.17*	.87**	.67**	---		
16) WIQ	.21*	.06	.77**	.15	.02	-.26**	.24**	-.04	.05	.16*	.12	.11	.30**	.29**	.28**	---	
17) JIQ	.20*	.02	.71**	.10	.06	-.14	.14	-.13	.02	.17*	.28**	-.02	.54**	.53**	.46**	.76**	---
18) SWLS	.03	-.05	.23**	.05	-.03	-.02	.08	-.26**	-.13	.17*	.43**	-.39**	.50**	.48**	.45**	.22**	.38**

*=$p < .05$, **= $p < .01$

CMNI(T)= Conformity to Masculine Norms Inventory (short form), total score, CMNI-R= Risk Taking CMNI Subscale, CMNI-Pr= Primacy of Work CMNI Subscale, CMNI-W= Winning CMNI Subscale, CMNI-E=Emotional Control CMNI Subscale, CMNI-V= Violence CMNI Subscale, CMNI-Po= Power over Women CMNI Subscale, CMNI-Pl= Playboy CMNI Subscale, Self-Reliance CMN I Subscale, CMNI-H= Heterosexual Self-Presentation CMNI Subscale, PANAS-P= Positive and Negative Affect Scale (Positive Affect score); PANAS-N= Positive and Negative Affect Scale (Negative Affect Score), MSQ(T)= Minnesota Satisfaction Questionnaire Total Score, MSQ-I= Minnesota Satisfaction Questionnaire (Intrinsic Subscale), MSQ-E= Minnesota Satisfaction Questionnaire (Extrinsic Subscale), WIQ= Work Importance Questionnaire, JIQ= Job Importance Questionnaire, SWLS= Satisfaction with Life Scale

Table 4

Intercorrelations for All Measures (Non-transformed) for Women only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1) CMNI(T)	---																
2) CMNI-R	.29**	---															
3) CMNI-Pr	.23*	.18*	---														
4) CMNI-W	.56**	.22*	.10	---													
5) CMNI-E	.47**	-.12	-.01	.04	---												
6) CMNI-V	.58**	.14	.04	.26**	.09	---											
7) CMNI-Po	.54**	.24**	.17	.24**	.14	.25**	---										
8) CMNI-Pl	-.01	.31**	.03	-.02	-.26**	.08	.05	---									
9) CMNI-S	.40**	-.25**	-.10	.03	.45**	.20*	.01	-.27**	---								
10) CMNI-H	.54**	-.21*	-.04	.23*	.13	.13	.24**	-.26**	.18*	---							
11) PANAS-P	.03	.26**	.13	.21*	-.34**	-.04	-.01	.03	-.24**	.08	---						
12) PANAS-N	.17	-.02	-.05	.06	.10	.11	.09	.07	.23**	.04	-.30**	---					
13) MSQ(T)	-.21*	.01	.20*	-.08	-.16	-.20*	-.10	-.13	-.21*	-.06	.29**	-.40**	---				
14) MSQ-I	-.24*	-.07	.15	-.09	-.14	-.19*	-.16	-.14	-.16	-.04	.30**	-.37**	.93**	---			
15) MSQ-E	-.12	.07	.21*	-.04	-.12	-.19*	.02	-.11	-.21*	-.04	.21*	-.35**	.87**	.63**	---		
16) WIQ	.08	.17*	.63**	-.05	.06	-.06	.26**	-.05	-.11	-.06	.06	.01	.35**	.29**	.34**	---	
17) JIQ	-.01	.13	.62**	-.05	-.01	-.13	.06	-.09	-.14	-.09	.15	-.04	.56**	.51**	.48**	.80**	---
18) SWLS	-.09	.22*	.04	-.02	-.22*	-.04	.10	-.10	-.25**	-.04	.54**	-.52**	.34**	.31**	.28**	.11	.11

*=$p < .05$, **= $p < .01$

CMNI(T)= Conformity to Masculine Norms Inventory (short form), total score, CMNI-R= Risk Taking CMNI Subscale, CMNI-Pr= Primacy of Work CMNI Subscale, CMNI-W= Winning CMNI Subscale, CMNI-E=Emotional Control CMNI Subscale, CMNI-V= Violence CMNI Subscale, CMNI-Po= Power over Women CMNI Subscale, CMNI-Pl= Playboy CMNI Subscale, Self-Reliance CMN I Subscale, CMNI-H= Heterosexual Self-Presentation CMNI Subscale, PANAS-P= Positive and Negative Affect Scale (Positive Affect score); PANAS-N= Positive and Negative Affect Scale (Negative Affect Score), MSQ(T)= Minnesota Satisfaction Questionnaire Total Score, MSQ-I= Minnesota Satisfaction Questionnaire (Intrinsic Subscale), MSQ-E= Minnesota Satisfaction Questionnaire (Extrinsic Subscale), WIQ= Work Importance Questionnaire, JIQ= Job Importance Questionnaire, SWLS= Satisfaction with Life Scale

In a preliminary examination of correlations between variables, there were high correlations between job satisfaction and positive affect ($r = .34$, $p < .001$), job satisfaction and negative affect ($r = -.30$, $p < .001$), and between positive affect and negative affect ($r = -.23$, $p < .001$). Additionally, the correlations between positive affect and life satisfaction ($r = .49$, $p < .001$) and negative affect with life satisfaction ($r = -.45$, $p < .001$), were slightly larger than job satisfaction and life satisfaction ($r = .42$, $p < .001$). This led to high multicollinearity in the regression model between job satisfaction and positive affect, between job satisfaction and negative affect, and between positive affect and negative affect. To avoid violations of assumptions of collinearity, positive and negative affect were removed as control variables from the main effect model.

Main Effect Analysis

Hierarchical regression analyses were conducted using PASW Statistics 18 Software to examine the above mentioned hypotheses. The first analysis tested whether job satisfaction would predict life satisfaction. The hypothesized model was supposed to include Positive Affect (PANAS) and Negative Affect as control variables, but was removed due to collinearity problems with Job Satisfaction (MSQ total). The full model of Education, Age, Income, Gender, Sexual Orientation, Ethnicity, and Job Satisfaction to predict Life Satisfaction was statistically significant, adjusted $R^2 = .259$, F (7, 269) = 14.77, $p < .001$. Job satisfaction accounted for an additional 15.9% of the variance beyond the control variables, a moderate effect size based on Cohen's evaluative criteria (Cohen, 1988). The addition of gender, sexual orientation, and ethnicity did not lead to a statistically significant increase in the amount of variance accounted for, $R^2 = .099$, $F(6, 270) = 6.04$, $p > .05$ (see table 5). This supports Hypothesis 1a that job satisfaction will predict life satisfaction. Additionally, the correlation of $r = .42$ is similar to the r = .44 result found in the Tait et al. (1989) meta-analysis.

Table 5

Hierarchical Regression Analysis Predicting Life Satisfaction by Job Satisfaction (n=277).

	Satisfaction with Life							
	B	SE B	B	95% CI		F	Adj. R^2	ΔR^2
Variable				Lower	Upper			
Step 1								
Education	-.19	.14	-.08	-.46	.09			
Age	2.72	3.51	.05	-4.19	9.63			
Income	.03***	.01	.32***	.02	.04			
Overall model						10.67	.10	.11***
Step 2								
Education	-.16	.14	-.07	-.44	.12			
Age	1.69	3.66	.03	-5.51	8.89			
Income	.03***	.01	.32***	.02	.04			
Gender	-.23	.93	-.02	-2.05	1.592			
Sexual Orientation	-1.68	.92	-.11	-3.50	.14			
Ethnicity	-.28	.40	-.04	-1.07	.51			
Overall model						6.04	.10	.01
Step 3								
Education	-.16	.13	-.07	-.41	.09			
Age	.30	3.32	.01	-6.24	6.84			
Income	.03***	.01	.28***	.02	.04			
Gender	-.22	.84	-.01	-1.87	1.44			
Sexual Orientation	-1.95*	.84	-.13*	-3.60	-.30			
Ethnicity	.02	.37	.01	-.70	.74			
Job Satisfaction	.27***	.04	.41***	.20	.34			
Overall model						14.77	.26	.16***

*p<.05, **p<.01, ***p<.001

In line with the third aim of the study, the above analysis was run separately for men and women. In the model with only male participants, the full model of Education, Age, Income, Sexual Orientation, Ethnicity, and Job Satisfaction was statistically significant, adjusted R^2 = .285, F (6, 146) = 11.09, p < .001. Job satisfaction accounted for an additional 18.1% of the variance in satisfaction with life scores beyond the effect of control variables, a medium effect size by Cohen's evaluative criteria (Cohen, 1988). The addition of sexual orientation and ethnicity did not lead to a statistically significant increase in the amount of variance accounted for, adjusted R^2 = .102, F (5,157) = 4.46, p > .05 (see table 6 for more information).

In the model with only female participants, the full model of Education, Age, Income, Sexual Orientation, Ethnicity, and Job Satisfaction was statistically significant, adjusted R^2 = .217, F (6, 115) = 6.58, p < .001. Job satisfaction accounted for an additional 13.3% of the variance beyond the control variables, a medium effect size by Cohen's evaluative criteria (Cohen, 1988). The addition of sexual orientation and ethnicity did not lead to a statistically significant increase in the amount of variance accounted for, adjusted R^2 = .085, F (5, 116) = 1.07, p > .05 (see table 7 for more information). This shows that job satisfaction predicts life satisfaction for both women and men, accounting for similar amounts of variance (28.5% for men, 21.7% for women).

Table 6

Hierarchical Regression Analysis Predicting Life Satisfaction by Job Satisfaction among Men (n= 153).

	Satisfaction with Life							
	B	SE B	β	95% CI		F	Adj. R^2	ΔR^2
Variable				Lower	Upper			
Step 1								
Education	-.27	.18	-.12	-.63	.10			
Age	.38	5.20	.01	-9.90	10.65			
Income	.03***	.01	.35***	.02	.05			
Overall model						6.58	.10	.12***
Step 2								
Education	-.27	.18	-.12	-.64	.09			
Age	.06	5.35	.01	-10.50	10.63			
Income	.03***	.01	.36***	.02	.05			
Sexual Orientation	-2.59	1.65	-.12	-5.84	.68			
Ethnicity	.11	.57	.02	-1.02	1.24			
Overall model						4.46	.10	.02
Step 3								
Education	-.25	.16	-.11	-.57	.08			
Age	.17	4.77	.01	-9.26	9.60			
Income	.02***	.01	.25***	.01	.04			
Sexual Orientation	-3.37	1.48	-.16	-6.29	-.45			
Ethnicity	.24	.51	.03	-.77	1.24			
Job Satisfaction	.30**	.05	.44**	.20	.38			
Overall Model						11.09	.29	.18***

*p<.05, **p<.01, ***p<.001

Table 7

Hierarchical Regression Predicting Life Satisfaction by Job Satisfaction among Women (n=122).

	Satisfaction with Life							
	B	SE B	β	95% CI		F	Adj. R^2	ΔR^2
Variable				Lower	Upper			
Step 1								
Education	-.07	.23	-.03	-.51	.38			
Age	6.03	5.26	.10	-4.39	16.44			
Income	.03**	.01	.31**	.01	.05			
Overall model						4.67	.08	.11**
Step 2								
Education	-.01	.23	-.01	-.46	.45			
Age	4.53	5.37	.08	-6.10	15.16			
Income	.03**	.01	.30**	.01	.05			
Sexual Orientation	-1.24	1.18	-.10	-3.58	1.10			
Ethnicity	-.68	.58	-.10	-1.84	.48			
Overall model						1.07	.09	.02
Step 3								
Education	-.04	.21	-.01	-.46	.39			
Age	2.68	4.98	.05	-7.19	12.55			
Income	.03***	.01	.32***	.02	.05			
Sexual Orientation	-1.27	1.09	-.10	-3.44	.90			
Ethnicity	-.14	.55	-.02	-1.24	.96			
Job Satisfaction	.25***	.05	.38***	.14	.35			
Overall Model						6.58	.22	.13***

*p<.05, **p<.01, ***p<.001

Positive Affect Predicting Life Satisfaction

As noted above, given the high correlations between job satisfaction and affect scores (positive and negative), and the high correlations between affect scores with life satisfaction, a hierarchical regression analysis was conducted to see whether affect would account for greater variance in life satisfaction than job satisfaction. The collinearity between positive and negative affect suggested that both should not be used in the same model simultaneously and negative affect (the weaker predictor) was removed from the model. The full model of Education, Age, Income, Sexual Orientation, Ethnicity, Gender, and Positive Affect (PANAS) was statistically significant, adjusted R^2 = .321, F (7, 270) = 19.72, p < .001. Positive affect accounted for an additional 22.3% of the variance in satisfaction with life beyond the control variables, a medium to large effect size based on Cohen's evaluative criteria (Cohen, 1988). The addition of sexual orientation, ethnicity, and gender did not lead to a statistically significant increase in the amount of variance accounted for adjusted R^2 = .095, F (6, 271) = 5.87, p > .05 (see table 8). This was unexpected, as positive affect accounted for slightly higher variance in satisfaction with life than job satisfaction (32.1% versus 25.9).

Table 8

Hierarchical Regression Predicting Life Satisfaction by Positive Affect (n=278).

	Satisfaction with Life							
	B	SE B	β	95% CI		F	Adj. R^2	ΔR^2
Variable				Lower	Upper			
Step 1								
Education	-.20	.14	-.08	-.47	.08			
Age	2.49	3.50	.04	-4.41	9.39			
Income	.03***	.01	.32***	.02	.04			
Overall model						10.32	.09	.01***
Step 2								
Education	-.17	.14	-.07	-.44	.11			
Age	1.39	3.65	.02	-5.79	8.58			
Income	.03***	.01	.32***	.02	.04			
Sexual Orientation	-1.72	.92	-.11	-3.53	.10			
Ethnicity	-.27	.40	-.040	-1.06	.52			
Gender	-.15	.92	-.01	-1.97	1.67			
Overall model						5.87	.10	.01
Step 3								
Education	-.10	.12	-.04	-.34	.14			
Age	-4.40	3.22	-.07	-10.74	1.93			
Income	.03***	.01	.26***	.02	.04			
Sexual Orientation	-1.90**	.80	-.12**	-3.47	-.32			
Ethnicity	-.55	.35	-.08	-1.24	.14			
Gender	.40	.80	.03	-1.18	1.97			
Positive Affect	.45***	.05	.49***	.36	.55			
Overall Model						19.72	.32	.22***

*p<.05, **p<.01, ***p<.001

In line with the third aim of the study, the same analysis was run separately by gender. In the model with only male participants, the full model of Education, Age, Income, Sexual Orientation, Ethnicity, and Positive Affect was significant $R^2 = .254$, F (6,145) = 9.64, p < .001. Positive affect accounted for an additional 15.9% of the variance beyond control variables, a moderate effect size based on Cohen's evaluative criteria (Cohen, 1988). The addition of sexual orientation and ethnicity did not lead to a statistically significant increase in the amount of variance accounted for, adjusted $R^2 = .102$, F (5, 146) = 4.46, p >.05 (see table 9). In the model

with only female participants, the full model of Education, Age, Income, Sexual Orientation, Ethnicity, and Positive Affect was statistically significant, adjusted R^2 = .375, F (6, 116) = 13.20, p < .001. Positive affect accounted for an additional 29.3% of the variance beyond the control variables, a large effect size based on Cohen's evaluative criteria (Cohen, 1988). The addition of sexual orientation and ethnicity did not lead to a statistically significant increase in the amount of variance accounted for, adjusted R^2 = .075, F (5, 117) = 13.20, p >.05 (see table 10).

This demonstrated that positive affect was a significant predictor of life satisfaction for both men and women, though accounted for a slightly larger amount of variance for women (25.4% of the variance for men, 37.5% of the variance for women). When compared to using job satisfaction as the main predictor of life satisfaction, there were little differences for men (28.5% for job satisfaction, 25.4% for positive affect). Positive affect was a much stronger predictor of life satisfaction for women than job satisfaction (21.7% for job satisfaction versus 37.5% for positive affect). This also pointed to the possibility of moderators in the relationship between job and life satisfaction, where viewing work as more important may alter the relationship (JSLS stronger at high levels of work importance, weaker at low levels of work importance).

Table 9

Hierarchical Regression Predicting Life Satisfaction by Positive Affect among Men (n=153).

	Satisfaction with Life							
	B	SE B	β	95% CI		F	Adj. R^2	ΔR^2
Variable				Lower	Upper			
Step 1								
Education	-.27	.18	-.12	-.63	.09			
Age	.38	5.20	.01	-9.90	10.65			
Income	.03***	.01	.35***	.02	.05			
Overall model						6.58	.10	.12***
Step 2								
Education	-.27	.18	-.12	-.64	.09			
Age	.06	5.35	.01	-10.50	10.63			
Income	.03***	.01	.36***	.02	.05			
Sexual Orientation	-2.59	1.65	-.12	-5.84	.68			
Ethnicity	.11	.57	.02	-1.02	1.24			
Overall model						4.46	.10	.02
Step 3								
Education	-.14	.17	-.06	-.47	.20			
Age	-4.40	4.94	-.07	-14.16	5.36			
Income	.03***	.01	.27***	.01	.04			
Sexual Orientation	-2.67	1.50	-.13	-5.64	.30			
Ethnicity	-.44	.53	-.06	-1.48	.61			
Positive Affect	.40***	.07	.41***	.26	.54			
Overall Model						9.64	.25	.15***

*p<.05, **p<.01, ***p<.001

Table 10

Hierarchical Regression Predicting Life Satisfaction by Positive Affect among Women (n=123).

	Satisfaction with Life							
	B	SE B	β	95% CI		F	Adj. R^2	ΔR^2
Variable				Lower	Upper			
Step 1								
Education	-.10	.22	-.04	-.54	.35			
Age	5.13	5.22	.09	-5.21	15.46			
Income	.03***	.01	.30***	.01	.05			
Overall model						4.22	.07	.10**
Step 2								
Education	-.03	.23	-.01	-.49	.42			
Age	3.61	5.33	.06	-6.94	14.16			
Income	.03**	.01	.28**	.01	.05			
Sexual Orientation	-1.30	1.18	-.10	-3.64	1.05			
Ethnicity	-.68	.59	-.10	-1.84	.48			
Overall model						2.98	.08	.02
Step 3								
Education	-.10	.19	-.04	-.48	.27			
Age	-3.88	4.49	-.07	-12.77	5.00			
Income	.03***	.01	.27***	.01	.04			
Sexual Orientation	-1.46	.97	-.11	-3.39	.47			
Ethnicity	-.52	.48	-.08	-1.48	.43			
Positive Affect	.50***	.07	.56***	.37	.63			
Overall Model						13.20	.38	.29***

*p<.05, **p<.01, ***p<.001

CMNI Primacy of Work Moderation Analyses

In line with the first aim of the study, the next step was to test for potential moderators in the relationship between job and life satisfaction. Following the recommendations of Frazier, Tix, and Barron (2004), the variables of CMNI primacy of work and job satisfaction (MSQ total) were centered and standardized. An interaction term was created by multiplying the standardized primacy of work variable by the standardized job satisfaction variable. The model was again tested using hierarchical regression models. The order of the models had control variables, identity variables, predictor variables, and the interaction term. Due to collinearity problems between education and income, education was removed from the analysis. The final model including Age, Income, Sexual Orientation, Ethnicity, Gender, Primacy of work (CMNI), Job satisfaction, and the interaction term was not significant, adjusted R^2 = .255, $F(8, 268)$ = 12.80, p >.05. While job satisfaction was a significant predictor of life satisfaction (p < .001), primacy of work was not (see table 11). Based on this result, hypothesis Hypothesis 1c was not supported and primacy of work did not moderate the relationship between job satisfaction and life satisfaction. This also means the current study was unable to show that adhering to masculine norms could lead to beneficial outcomes on life satisfaction.

Table 11

Examining the Potential Moderating Impact of CMNI primacy of work on the relationship between Job Satisfaction and Life Satisfaction (n=277).

	Satisfaction with Life							
	B	SE B	β	95% CI		F	Adj. R^2	ΔR^2
Variable				Lower	Upper			
Step 1								
Age	2.76	3.51	.05	-4.16	9.68			
Income	.03***	.01	.31***	.20	.04			
Overall model						15.05	.10	.10***
Step 2								
Age	1.55	3.66	.03	-5.65	8.75			
Income	.03***	.01	.31***	.02	.04			
Sexual Orientation	-1.81	.92	-.12	-3.61	-.01			
Ethnicity	-.31	.40	-.05	-1.10	.48			
Gender	-.14	.92	-.01	-1.95	1.68			
Overall model								
Step 3						6.99	.10	.02
Age	.56	3.35	.01	-6.04	7.15			
Income	.03***	.01	.26***	.02	.04			
Sexual Orientation	-2.17**	.84	-.14**	-3.82	-.52			
Ethnicity	-.07	.37	-.01	-.80	.66			
Gender	-.06	.84	-.01	-1.71	1.60			
(z)Primacy of Work	.43	.45	.05	-.45	1.31			
(z) Job Satisfaction	3.10**	.44	.39**	2.24	3.97			
Overall model						14.63	.26	.16***
Step 4								
Age	.78	3.38	.01	-5.87	7.44			
Income	.03***	.01	.26***	.02	.04			
Sexual Orientation	-2.15**	.84	-.14**	-3.80	-.50			
Ethnicity	-.06	.37	-.01	-.79	.67			
Gender	-.10	.85	-.01	-1.76	1.57			
(z)Primacy of Work	.46	.45	.06	-.43	1.35			
(z)Job Satisfaction	3.04***	.46	.38***	2.15	3.94			
Interaction term	-.21	.40	-.03	-.10	.57			
Overall Model						12.80	.26	.01

*p<.05, **p<.01, ***p<.001, (z)=standardized term

In line with the third aim of the study, the same moderation analysis was run separately by gender. In the analysis including just men, the final model of Age, Income, Sexual Orientation, Ethnicity, Primacy of work (CMNI), Job satisfaction, and the interaction term was not significant, adjusted R^2 = .274, $F(7, 145) = 9.18$, $p > .05$. Similar to the analysis with men and women grouped together, job satisfaction was a significant predictor of life satisfaction ($p <$ .001), while primacy of work was not ($p < .05$, see table 12). In the analysis including only women, the final model of Age, Income, Sexual Orientation, Ethnicity, Primacy of work (CMNI), Job satisfaction, and the interaction term was not significant, adjusted R^2 = .218, $F(7,114) = 5.81$, $p > .05$. And as noted above, job satisfaction was a significant predictor of life satisfaction ($p < .001$), while primacy of work was not ($p < .05$, see table 13). This suggested that there was no incremental increase in variance accounted for by using primacy of work as a moderator, whether for men and women combined, or separately.

Table 12

Examining the Potential Moderating Impact of CMNI primacy of work on the relationship between Job Satisfaction and Life Satisfaction, among Men (n=153).

	Satisfaction with Life							
	B	SE B	β	95% CI		F	Adj R^2	ΔR^2
Variable				Lower	Upper			
Step 1								
Age	-.82	5.16	-.01	-11.01	9.37			
Income	.03***	.01	.33***	.02	.05			
Overall model						8.72	.09	.10***
Step 2								
Age	-1.23	5.29	-.02	-11.70	9.23			
Income	.03***	.01	.33***	.02	.05			
Sexual Orientation	-2.59	1.66	-.12	-5.86	.68			
Ethnicity	.07	.57	.01	-1.06	1.20			
Overall model						4.99	.10	.02
Step 3								
Age	-.34	4.80	-.01	-9.80	9.10			
Income	.02**	.01	.22**	.01	.03			
Sexual Orientation	-3.55*	1.50	-.17*	-6.50	-.59			
Ethnicity	.10	.52	.01	-.93	1.13			
(z)Primacy of Work	.57	.60	.07	-.61	1.75			
(z) Job Satisfaction	3.35***	.61	.42***	2.14	4.55			
Overall model						10.77	.28	.19***
Step 4								
Age	-.40	4.80	-.01	-9.89	9.08			
Income	.02**	.01	.22**	.01	.03			
Sexual Orientation	-3.62*	1.53	-.17*	-6.63	-.60			
Ethnicity	.10	.52	.01	-.93	1.14			
(z) Primacy of Work	.56	.60	.07	-.63	1.75			
(z) Job Satisfaction	3.37***	.62	.42***	2.15	4.59			
Interaction term	.13	.51	.02	-.90	1.14			
Overall Model						9.18	.27	.00

*p<.05, **p<.01, ***p<.001, (z)=standardized term

Table 13

Examining the Potential Moderating Impact of CMNI primacy of work on the Relationship between Job Satisfaction and Life Satisfaction, among Women. (n=122).

	Satisfaction with Life							
	B	SE B	β	95% CI		F	Adj R^2	ΔR^2
Variable				Lower	Upper			
Step 1								
Age	6.30	5.15	.11	-3.90	16.50			
Income	.03***	.01	.31***	.01	.05			
Overall model								
Step 2						7.02	.09	.10***
Age	4.54	5.30	.07	-5.95	15.03			
Income	.03***	.01	.30***	.01	.05			
Sexual Orientation	-1.24	1.16	-.10	-3.53	1.05			
Ethnicity	-.68	.58	-.10	-1.83	.46			
Overall model						4.08	.09	.02
Step 3								
Age	2.88	4.96	.05	-6.94	12.70			
Income	.03***	.01	.32***	.02	.05			
Sexual Orientation	-1.32	1.08	-.10	-3.47	.82			
Ethnicity	-.15	.55	-.02	-1.25	.94			
(z)Primacy of Work	.13	.70	.02	-1.26	1.51			
(z) Job Satisfaction	2.94***	.67	.37***	1.62	4.25			
Overall model						6.59	.22	.13***
Step 4								
Age	4.05	5.08	.07	-6.02	14.11			
Income	.03***	.01	.33***	.02	.05			
Sexual Orientation	-1.40	1.08	-.11	-3.55	.75			
Ethnicity	-.09	.55	-.01	-1.19	1.02			
(z) Primacy of Work	.29	.71	.03	-1.13	1.71			
(z) Job Satisfaction	2.67***	.71	.34***	1.25	4.08			
Interaction term	-.71	.68	-.10	-2.05	.63			
Overall Model						5.81	.22	.01

*p<.05, **p<.01, ***p<.001, (z)=standardized term

Work Importance and Job Importance Moderation Analyses

To test Hypothesis 1b, additional hierarchical regression analyses were conducted, using the same methods as above. Work Importance (WIQ) scores were centered, standardized, and multiplied by the standardized Job Satisfaction scores (MSQ total) to create a product term. The order of the models had control variables, identity variables, predictor variables, and the interaction term. The final model including Age, Income, Sexual Orientation, Ethnicity, Gender, Work Importance, Job Satisfaction, and the interaction term was not significant, adjusted R^2 = .256, $F(8, 267) = 12.80$, $p > .05$. While job satisfaction was a significant predictor of life satisfaction ($p < .001$), Work Importance was not (See table 14). Based on this result, Hypothesis 1b was not supported and work importance did not moderate the relationship between job satisfaction and life satisfaction.

As the work importance moderator was not significant, an additional model was run to see whether job importance might moderate the relationship between job satisfaction and life satisfaction. If true, it could suggest that the importance of a current, specific job may impact the JSLS relationship while the value of the importance of work in general does not. Job Importance (JIQ) scores were centered, standardized, and multiplied by standardized job satisfaction scores (MSQ total) to create a product term. The order of the models had control variables, identity variables, predictor variables, and the interaction term. The final model including Age, Income, Sexual Orientation, Ethnicity, Gender, Job Importance, Job Satisfaction, and the interaction term was not significant, adjusted R^2 = .244, $F(8, 264) = 11.98$, $p > .05$. While job satisfaction was a significant predictor of life satisfaction ($p < .001$), job importance was not ($p > .05$, see table 15).

Table 14

Examining the Potential Moderating Impact of Work Importance on the Relationship between Job Satisfaction and Life Satisfaction (n=276).

	Satisfaction with Life							
	B	SE B	B	95% CI		F	Adj. R^2	ΔR^2
Variable				Lower	Upper			
Step 1								
Age	2.44	3.52	.04	-4.50	9.37			
Income	.03***	.01	.31***	.02	.04			
Overall model						15.02	.09	.10***
Step 2								
Age	1.31	3.66	.02	-5.90	8.51			
Income	.03***	.01	.31***	.02	.04			
Sexual Orientation	-1.78	.92	-.12	-3.58	.02			
Ethnicity	-.30	.40	-.04	-1.09	.49			
Gender	-.20	.92	-.01	-2.02	1.62			
Overall model						6.96	.10	.02
Step 3								
Age	.03	.01	.26	-6.32	6.99			
Income	-2.03***	.83	-.13***	.02	.04			
Sexual Orientation	-.03**	.37	-.01**	-3.67	-.40			
Ethnicity	-.15	.84	-.01	-.76	.69			
Gender	.33	.45	.04	-1.80	1.51			
(z) Work Importance	3.13	.45	.39	-.55	1.21			
(Z) Job Satisfaction	.03***	.01	.26***	2.25	4.01			
Overall model						14.62	.26	.16***
Step 4								
Age	.42	3.39	.01	-6.250	7.09			
Income	.03***	.01	.26***	.02	.04			
Sexual Orientation	-2.03**	.83	-.13**	-3.67	-.39			
Ethnicity	-.02	.37	-.01	-.75	.70			
Gender	-.13	.84	-.01	-1.78	1.53			
(z) Work Importance	.36	.45	.05	-.53	1.25			
(Z) Job Satisfaction	3.07***	.46	.39***	2.16	3.97			
Interaction Term	-.23	.40	-.03	-1.02	.56			
Overall Model						12.80	.26	.01

*p<.05, **p<.01, ***p<.001, (z)=standardized term

Table 15

Examining the Potential Moderating Impact of Job Importance on the Relationship between Job Satisfaction and Life Satisfaction (n=273).

	Satisfaction with Life							
	B	SE B	B	95% CI		F	Adj. R^2	ΔR^2
Variable				Lower	Upper			
Step 1								
Age	2.08	3.53	.03	-4.86	9.03			
Income	.03***	.01	.30***	.02	.04			
Overall model						14.07	.09	.09***
Step 2								
Age	.61	3.68	.01	-6.64	7.87			
Income	.03***	.01	.31***	.02	.04			
Sexual Orientation	-1.90*	.92	-.12*	-3.70	-.09			
Ethnicity	-.34	.40	-.05	-1.13	.45			
Gender	.09	.93	.01	-1.75	1.92			
Overall model						6.65	.09	.02
Step 3								
Age	-.30	3.38	-.01	-6.95	6.35			
Income	.03***	.01	.26***	.02	.04			
Sexual Orientation	-2.11*	.84	-.14*	-3.76	-.46			
Ethnicity	-.05	.37	-.01	-.77	.68			
Gender	.03	.85	.01	-1.65	1.71			
(z) Job Importance	.26	.50	.03	-.73	1.25			
(Z) Job Satisfaction	3.01***	.51	.38***	2.01	4.01			
Overall model						13.44	.24	.15***
Step 4								
Age	-.25	3.37	-.01	-6.89	6.39			
Income	.03***	.01	.26***	.02	.04			
Sexual Orientation	-2.15*	.84	-.14*	-3.80	-.50			
Ethnicity	-.04	.37	-.01	-.77	.68			
Gender	.07	.85	.01	-1.61	1.75			
(z) Job Importance	.34	.51	.04	-.66	1.33			
(Z) Job Satisfaction	2.85***	.52	.36***	1.82	3.88			
Interaction Term	-.48	.38	-.07	-1.23	.28			
Overall Model						11.98	.24	.01

*p<.05, **p<.01, ***p<.001, (z)=standardized term

Gender Moderator Analysis

To test Hypothesis 2a, another moderation analysis was conducted using hierarchical linear regression to test whether the relationship between job satisfaction and life satisfaction would vary by gender. Gender was dummy coded, with males coded as -1 and females coded as 1 (as there is no "control" or "reference" group in this specific variable). A product term was created by multiplying the standardized Job Satisfaction scores (MSQ total) to create a product term. The order of the models had control variables, identity variables, predictor variables, and the interaction term. The final model including Age, Income, Education, Sexual Orientation, Ethnicity, Gender dummy code, Job Satisfaction, and the interaction term was not significant, adjusted $R^2 = .253$, $F(7, 267) = 14.27$, $p > .05$. While job satisfaction was a significant predictor of life satisfaction ($p < .001$), gender was not (see table 16). This supports Hypothesis 2a, that the strength of the relationship between job satisfaction and life satisfaction will not vary by gender.

Table 16

Examining the Potential Moderating Impact of Gender on the Relationship between Job Satisfaction and Life Satisfaction (n=262).

	Satisfaction with Life							
	B	SE B	B	95% CI		F	Adj. R^2	**ΔR^2**
Variable				Lower	Upper			
Step 1								
Age	1.54	3.58	.03	-5.51	8.59			
Income	.03***	.01	.32***	.02	.04			
Education	-.14	.15	-.06	-.44	.15			
Overall model						15.28	.09	.10***
Step 2								
Age	.87	3.63	.01	-6.28	8.03			
Income	.03***	.01	.32***	.02	.04			
Education	-.13	.15	-.05	-.43	.17			
Sexual Orientation	-1.35	.97	-.08	-3.25	.55			
Ethnicity	-.16	.42	-.02	-.98	.66			
Overall model						8.66	.10	.01
Step 3								
Age	.20	3.40	.01	-6.49	6.89			
Income	.03***	.01	.28***	.02	.04			
Education	-.16	.14	-.07	-.43	.11			
Sexual Orientation	-1.96*	.89	-.12*	-3.71	-.20			
Ethnicity	.15	.38	.02	-.60	.90			
Gender	-.23	.44	-.03	-1.10	.64			
(z) Job Satisfaction	3.24***	.43	.41***	2.39	4.09			
Overall model						16.67	.26	.16***
Step 4								
Age	.25	3.41	.01	-6.46	6.96			
Income	.028***	.01	.27***	.02	.04			
Education	-.16	.14	-.07	-.43	.11			
Sexual Orientation	-1.95*	.90	-.12*	-3.71	-.18			
Ethnicity	.13	.38	.02	-.62	.89			
Gender	-.23	.44	-.03	-1.10	.64			
(z) Job Satisfaction	3.23***	.44	.41***	2.37	4.09			
Interaction Term	-.15	.44	-.02	-1.01	.71			
Overall Model						14.27	.25	.01

*p<.05, **p<.01, ***p<.001, (z)=standardized term

PANAS Mediation Analysis

Given the above results that job satisfaction significantly predicts life satisfaction, positive affect significantly predicts life satisfaction, and job and life satisfaction are correlated, it suggests that positive affect may be a mediator of the job and life satisfaction relationship. The analysis was conducted using hierarchical linear regression through the "PROCESS" macro (Preacher & Hayes, 2008). This method uses bootstrapping as opposed to a Sobel's test for examining indirect effects. The authors note that bootstrapping "does not impose the assumption of normality on the sampling distribution. Bootstrapping is a computationally intensive method that involves repeatedly sampling from the data set and estimating the indirect effect in each resampled data set" (p. 880). MacKinnon, Lockwood, Hoffman, West, and Sheets (2002) noted that bootstrapping allows for higher power and reasonable control over the type I error rates than a Sobel's test.

This analysis used hierarchical linear regression and the "PROCESS" macro to test if the effect of job satisfaction on life satisfaction, is truly due to the impact of job satisfaction on positive and negative affect, which then impact life satisfaction. This analysis tested the indirect effect of job satisfaction on life satisfaction, through Positive Affect and Negative Affect, after controlling for sexual orientation, ethnicity, gender, age, and income. The final model was statistically significant, adjusted $R^2 = .456$, $F(8, 268) = 29.87$, $p < .001$. The impact of both positive affect and negative affect were significantly different from zero, 95% Bias Corrected CI [.06, .13] for Positive Affect, [.03, .10] for Negative Affect. A contrast was run to see whether the two mediators were significantly different from each other. The results showed that Positive and Negative Affect were not significantly different from each other, 95% Bias Corrected CI [-.02,.07]. This suggests that while both mediators are significant, their magnitude is not

significantly different from each other (see table 17 and Figure 1). This model showed the greatest level of variance in life satisfaction accounted for (45.6%) by any of the models.

In line with the third aim of the study, this same analysis was conducted separately by gender. In the model including women only, the final model testing the indirect effect of Job Satisfaction on Life Satisfaction, through Positive Affect and Negative Affect, after controlling for sexual orientation, ethnicity, age, and income was statistically significant, adjusted R^2 = .512, $F(7, 114) = 19.15$, $p < .001$. The impact of both positive affect and negative affect were significantly different from zero, 95% Bias Corrected CI [.03, .14] for Positive Affect, [.04, .18] for Negative Affect. A contrast was run to see whether the two mediators were significantly different from each other. The results showed that Positive and Negative Affect were not significantly different from each other, 95% Bias Corrected CI [-.10, .06]. This suggests that while both mediators are significant, their magnitude is not significantly different from each other (see table 18). Similar to the result with gender combined, this model accounted for greater variance (51.2%) in life satisfaction for women than any other model.

In the model including men only, the final model testing the indirect effect of Job Satisfaction on Life Satisfaction, through Positive Affect and Negative Affect, after controlling for sexual orientation, ethnicity, age, and income was statistically significant, adjusted R^2 = .427, $F(7, 145) = 15.45$, $p < .001$. The impact of both positive affect and negative affect were significantly different from zero, 95% Bias Corrected CI [.04, .14] for Positive Affect, [.01, .09] for Negative Affect. A contrast was run to see whether the two mediators were significantly different from each other. The results showed that Positive and Negative Affect were not significantly different from each other, 95% Bias Corrected CI [-.02, .10]. This suggests that while both mediators are significant, their magnitude is not significantly different from each

other (see table 19). Similar to the result with gender combined, this model accounted for greater variance (42.7%) in life satisfaction for men than any other model. This suggests that the multiple mediator model is the most explanatory model of job satisfaction and life satisfaction.

Table 17
Testing the Indirect Effect of Job Satisfaction on Life satisfaction, Through Positive Affect and Negative Affect, after controlling for sexual orientation, ethnicity, gender, age, and income (n=277).

	Satisfaction with Life						
	Product of Coefficients			95% CI		BC 95% CI	
Variable	Point Estimate	SE	Z	Lower	Upper	Lower	Upper
				Indirect Effect			
Positive Affect	.09	.02	.08	.05	.12	.06	.13
Negative Affect	.06	.02	.04	.03	.10	.03	.10
Total	.15	.03	.12	.10	.20	.10	.21
				Contrasts			
Positive vs. Negative	.02	.02	.04	-.03	.07	-.02	.07

BC= bias corrected; Z= Bootstrap corrected; 5,000 bootstrap samples

Table 18

Testing the Indirect Effect of Job Satisfaction on Life satisfaction among Women, Through Positive Affect and Negative Affect, after controlling for sexual orientation, ethnicity, gender, age, and income (n=122).

	Satisfaction with Life						
	Product of Coefficients			95% CI		BC 95% CI	
Variable	Point Estimate	SE	Z	Lower	Upper	Lower	Upper
				Indirect Effect			
Positive Affect	.08	.03	.08	.03	.14	.03	.14
Negative Affect	.10	.03	.10	.04	.17	.04	.18
Total	.17	.05	.17	.09	.27	.09	.28
				Contrasts			
Positive vs. Negative	-.02	.04	-.02	-.10	.06	-.10	.06

BC= bias corrected; Z= Bootstrap corrected; 5,000 bootstrap samples

Table 19

Testing the Indirect Effect of Job Satisfaction on Life satisfaction among Men, Through Positive Affect and Negative Affect, after controlling for sexual orientation, ethnicity, gender, age, and income (n=153).

	Satisfaction with Life						
	Product of Coefficients			95% CI		BC 95% CI	
Variable	Point Estimate	SE	Z	Lower	Upper	Lower	Upper
				Indirect Effect			
Positive Affect	.08	.02	.08	.03	.13	.04	.14
Negative Affect	.04	.02	.04	.01	.09	.01	.09
Total	.12	.03	.12	.06	.19	.06	.19
				Contrasts			
Positive vs. Negative	.04	.03	.04	-.02	.09	-.02	.10

BC= bias corrected; Z= Bootstrap corrected; 5,000 bootstrap samples

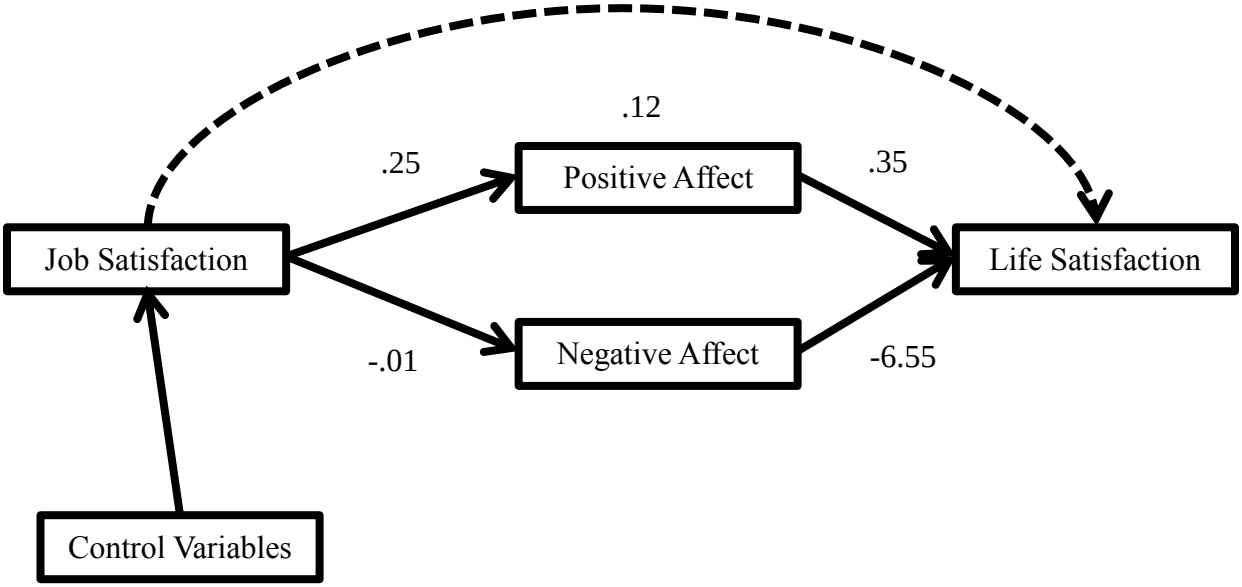

Figure 1
The Indirect Effect of Job Satisfaction on Life Satisfaction, Through Positive and Negative Affect

CMNI Scores by Gender

In line with the fourth aim of the study to examine how traditional masculine norms act similarly or differently by gender, sexual orientation, and ethnicity, a variety of t-tests were conducted. As noted above, there was too little variability across ethnicity or sexual orientation to conduct the analysis. This made the current study unable to test hypothesis H3g, H3h, or H3i. An independent samples t-test was conducted to compare the CMNI scores for men and women. There were significant differences in CMNI total scores $t(255) = 7.87$, $p < .001$, $\eta^2 = .195$), and the following subscales: risk taking ($t[284] = 4.50$, $p < .001$, $\eta^2 = .066$), winning ($t[281] = 4.12$, $p < .001$, $\eta^2 = .057$), emotional control ($t[276] = 2.72$, $p = .007$, $\eta^2 = .026$), violence ($t[277] = 5.41$, $p < .001$, $\eta^2 = .096$), power over women ($t[286] = 5.43$, $p < .001$, $\eta^2 = .094$), and playboy ($t[285] = 7.66$, $p < .001$, $\eta^2 = .171$). See table 20 for more information, including specific means.

The following were not significantly different between men and women: primacy of work ($t[286] = 1.18$, $p = .24$, $\eta^2 = .005$), self-reliance($t[284] = .200$, $p = .84$, $\eta^2 = .000$), heterosexual self-presentation ($t[244] = 1.93$, $p = .06$, $\eta^2 = .013$). In addition, in line with the third aim of the

study, the following were tested for differences in mean scores by gender and were not significant: work importance (WIQ- $t[285] = 1.40$, $p = .16$, $\eta^2 = .007$), job importance (JIQ- $t[282] = .01$, $p = .99$, $\eta^2 = .000$), Job Satisfaction (MSQ Total- $t[285] = -.70$, $p = .49$, $\eta^2 = .002$), Positive Affect ($t[286] = .37$, $p = .71$, $\eta^2 = .000$), Negative Affect ($t[286] = -.35$, $p = .73$, $\eta^2 = .000$), Income $t[281] = .37$, $p = .95$, $\eta^2 = .000$), Total Education ($t[273] = 1.01$, $p = .31$, $\eta^2 = .004$), and Satisfaction with Life ($t[282] = .37$, $p = .71$, $\eta^2 = .000$).

Table 20
Independent Samples T-tests of Differences in Scores by Gender

	Men		Women				95% CI		
Variable	M	SD	M	SD	df	T	Lower	Upper	η^2
CMNI total	106.63	12.39	94.59	12.01	255	7.87***	9.03	15.06	0.195
CMNI Risk taking	11.22	2.73	9.83	2.73	284	4.49***	0.78	2.01	0.066
CMNI Primacy of work	6.63	2.08	6.35	1.99	286	1.18	-0.19	0.76	.005
CMNI winning	15.05	3.52	13.38	3.19	281	4.12***	0.87	2.46	0.057
CMNI Emotional Control	15.59	3.45	14.40	3.83	276	2.72**	0.33	2.05	0.026
CMNI violence	15.49	3.72	13.11	3.56	277	5.41***	1.51	3.25	0.096
CMNI Power over Women	7.94	2.14	6.57	2.12	286	5.43***	0.88	1.87	0.094
CMNI Playboy	9.49	2.92	6.95	2.62	285	7.66***	1.88	3.19	0.171
CMNI Self-Reliance	12.11	2.95	12.04	2.83	284	0.20	-0.61	0.75	<.001
CMNI Heterosexual Self-representation	13.78	4.16	12.70	5.04	244	1.93	-0.02	2.17	.013
Work Importance	16.86	5.64	15.94	5.36	285	1.40	-0.37	2.20	.007
Job Importance	30.37	9.43	30.36	9.48	282	0.01	-2.21	2.23	<.001
Job Satisfaction	71.54	11.95	72.54	12.41	285	-0.69	-3.84	1.85	<.001
Positive Affect	35.61	8.12	35.24	8.80	286	0.37	-1.60	2.34	<.001
Negative Affect	15.81	6.39	16.07	6.05	286	-0.35	-1.71	1.20	<.001
Income	52,685	44,879	52,397	37,367	281	0.06	-9,517	10,094	<.001
Total Education	12.80	3.27	12.40	3.22	273	1.02	-0.38	1.17	.004
Satisfaction with Life	20.36	7.82	20.02	8.09	282	0.37	-1.52	2.21	<.001

*p<.05, **p<.01, ***p<.001, M=Mean, SD=Standard Deviation, df= degrees of freedom, CMNI=Conformity to Masculine Norms Inventory

This analysis helps address a number of hypotheses. Hypothesis 3a was supported in showing that men had significantly higher CMNI total scores, Hypothesis 3b was supported in showing that men had significantly higher scores on the power over women subscale of the CMNI, Hypothesis 3c was supported in showing men have significantly higher scores on the power over women subscale of the CMNI, Hypothesis 3d was supported in showing men have significantly higher scores on the playboy subscale of the CMNI, and Hypothesis 3e was supported in showing that there were no significant differences in heterosexual self-presentation between men and women. When considering the overall pattern of scores, two of the results (CMNI total scores, CMNI playboy) were in the large effect size range, 2 were in the moderate effect size range (CMNI Risk taking, CMNI Violence, CMNI power over women), and 5 were in the small to no effect range (CMNI primacy of work, CMNI winning, CMNI Emotional Control, CMNI Self-reliance, CMNI Heterosexual self-presentation). This is consistent with the gender similarities hypothesis (Hyde, 2005), where the majority of results were in the small to no effect size, only a few in the moderate effect size range, and even fewer in the large effect size range (especially when considering differences in the CMNI playboy contribute to differences in the CMNI total score).

Additional Results

Though not hypothesized, there was a strong correlation between negative affect and the self-reliance subscale on the CMNI (r = .21 globally, r =.21 for men, and r=.24 for women). To investigate this further, a hierarchical regression was conducted. Sexual orientation was removed from this model due to high collinearity with gender (there were more men who identified as gay/bisexual than women who identified as lesbian/bisexual). The full model of Age, Income, Ethnicity, Gender, and CMNI self-reliance to predict Life Satisfaction was

statistically significant, adjusted R^2 = .089, F(5, 277) = 6.51, p <.001. This accounted for an additional 2.5% of the variance beyond the control variables, a small effect size based on Cohen's evaluative criteria (Cohen, 1988). The addition of gender and ethnicity did not lead to a statistically significant increase in the amount of variance accounted for, adjusted R^2 = .057, F(4,278) = 5.25, p >.05. While the full model was statistically significant, the effect size was relatively small (accounting for only 8.9% of overall variance in negative affect). This suggests that self-reliance is a statistically significant predictor of negative affect, but may not be a practically meaningful predictor of negative affect.

Table 21
Hierarchical Regression Predicting Negative Affect by CMNI Self-reliance (n=283).

	Satisfaction with Life							
	B	SE B	β	95% CI		F	Adj. R^2	**ΔR^2**
Variable				Lower	Upper			
Step 1								
Age	-.56***	.16	-.21***	-.87	-.25			
Income	-.01	.00	-.14	-.01	.00			
Overall model								
Step 2						9.62	.06	.06***
Age	-.60***	.16	-.22***	-.92	-.28			
Income	-.00*	.00	-.14*	-.01	.00			
Ethnicity	-.01	.02	-.03	-.05	.03			
Gender	.05	.04	.07	-.03	.13			
Overall model								
Step 3						5.25	.06	.01
Age	-.60***	.16	-.22***	-.91	-.28			
Income	.00	.00	-.11	-.01	.00			
Ethnicity	-.01	.02	-.04	-.05	.02			
Gender	.05	.04	.07	-.03	.13			
CMNI self-reliance	.02**	.01	.19**	.01	.04			
Overall model						6.51	.09	.03**

*p<.05, **p<.01, ***p<.001

Discussion

Main Effect Results

The first purpose of the current study was to replicate previous research showing a relationship between job satisfaction and life satisfaction (Judge & Watanabe, 1993; Rain et al., 1991; Rice et al., 1980; Tait et al., 1989) and examine moderators of this relationship. The results of the current study were congruent with previous research, finding job satisfaction to significantly predict life satisfaction. The correlation of r = .42 found in the current study follows results found in previous review articles and meta-analyses (Rain et al., 1991; Steiner & Truxillo, 1987; Tait et al., 1989) showing correlations of r = .44. The current study also showed similar results when the JSLS relationship was analyzed separately by gender. The current study showed correlations between job and life satisfaction for women of r =.37, which is congruent with the results from a review of JSLS studies by Tait et al. (1989) showing a correlation of r = .39 for women in studies conducted after 1974. Similarly, the correlation in the current study of r = .48 between job and life satisfaction for men is relatively close to the Tait et al. (1989) data showing correlations between job and life satisfaction for men (post 1974) of r = .37. While the differences in the strength of the JSLS relationship may appear significantly different across gender, further analysis proved otherwise. This is also congruent with past research showing no significant differences in the strength of the JSLS relationship by gender (Tait et al., 1989). While the main effect showed job satisfaction predicting life satisfaction (and similarly across gender), the strength of positive and negative affect on the JSLS relationship was unexpected.

In the current study, positive affect acted far more strongly on the JSLS relationship than anticipated. Positive and negative affect had been originally considered to be control variables in

the current study, based on Rain et al. (1991), but proved to be significantly better predictors of life satisfaction than job satisfaction. The job satisfaction model accounted for 25.9% of the variance in life satisfaction, while models using positive affect accounted for 32.1% of the variance in life satisfaction. When separated by gender, men showed similar effect sizes when comparing the impact of job satisfaction on life satisfaction and positive affect satisfaction on life satisfaction (28.5% and 25.4% of variance accounted for respectively). Women showed a much larger amount of variance accounted for with positive affect than job satisfaction (37.5% and 21.7% respectively). Given the relationships between job satisfaction and positive affect, the current study examined positive and negative affect as mediators of the relationship between job and life satisfaction. This multiple mediator model accounted for the greatest variance in life satisfaction, explaining 45.6% of the variance overall, 42.7% for men and 51.7% for women. This model suggested that the impact of job satisfaction is significant, but most strongly through its indirect effect on positive and negative affect. While unexpected, there is some evidence in previous literature that positive affect may be a stronger predictor of life satisfaction than job satisfaction.

Some research suggests that positive affect is strongly related to job satisfaction and other research suggests that positive affect and life satisfaction are subcomponents of the larger construct of subjective well-being. In a meta-analysis by Thoresen et al. (2003), the results of 79 studies showed a correlation of $r = .28$ between positive affect and job satisfaction, and $r = -.28$ between negative affect and job satisfaction (based on 176 studies). While this provides a fairly small effect size, this suggests that affect and job satisfaction may be related more strongly than would be expected of a control variable. A separate meta-analysis (Bowling, Eschleman, & Wang, 2010) examined relationships between job satisfaction, life satisfaction, and affect. This

study found a correlation of r = .38 between positive affect and job satisfaction across 47 studies, a correlation of r = .40 between job satisfaction and life satisfaction across 53 studies, and a correlation of r = *.36* between job satisfaction and happiness (component of positive affect) across 15 studies. This further suggests that there is a strong relationship between affect (both positive and negative) and job satisfaction. According to Social Cognitive Career Theory (Lent et al., 2005), positive affect would have both a direct effect on life satisfaction, as well as an effect on domain satisfaction. It is possible that the work domain could fit as a specific "domain satisfaction" in this model. Based on this model, it is possible that positive affect could affect life satisfaction directly and indirectly through its effect on domain (job) satisfaction. Another possible explanation could be that affect and life satisfaction could be strongly related because they may be subcomponents of a larger construct. Diener, Suh, Lucas, and Smith (1999) view life satisfaction, positive affect, and negative affect as components of the construct of subjective well-being. Future research would benefit from clarifying whether affect and life satisfaction are part of the same construct, as well as testing specific models which explain the relationship between affect, job satisfaction, and life satisfaction. Similar to the impact of positive affect, there were unexpected results found in the JSLS moderator analyses.

Moderators in the JSLS Relationship

In addition to replicating studies showing a positive relationship between job satisfaction and life satisfaction, this study examined for potential moderators of the relationship between job and life satisfaction. Contrary to hypotheses, none of the tested variables showed a significant moderating impact on the relationship between job and life satisfaction. This contradicts the hypothesis by many authors (Bamundo & Kopelman, 1980; Moser & Schuler, 2004; Rain et al., 1991; Steiner & Truxillo, 1987, 1989) that work importance would significantly moderate the

relationship between job and life satisfaction. In particular, neither viewing work as the primary role in life, the importance of work, or job importance were significant moderators of the relationship between job and life satisfaction. Conversely, the results of the current study are congruent with two previous studies which were unable to show a job importance as a significant moderator of the JSLS relationship (Rice et al., 1985, 1980).

The null result had been dismissed previously, attributing the lack of significance to using poor measures that lacked evidence of validity and reliability (Steiner & Truxillo, 1987). In the first aim of the project, the current study had attempted to address these criticisms through including instruments with demonstrated reliability and validity. The current research did not see a significant moderating effect of either work importance or job importance on the JSLS relationship (globally or by gender), despite using measures with strong reliability and validity evidence (Kanungo, 1982). A separate measure of work involvement (CMNI Primacy of work) was hypothesized to potentially moderate the relationship between job and life satisfaction, but was also found to not be a significant moderator of the JSLS relationship. Scores on both of these measures (CMNI, WIQ) have shown to have strong reliability and validity, which discounts concerns of finding a null result due to the use of measures lacking psychometric data. The results of the current study suggest that the level of importance of work (tested through 3 separate scales) does not significantly moderate the relationship between job and life satisfaction. It is possible that work importance does moderate the JSLS relationship, but simply has too little power to be detected in the current study. This aligns with other research showing that power will be low in moderation analyses where both variables are continuous, the study is not an experimental design, and moderator variables are measured with relatively short scales

(McClelland & Judd, 1993). It may require a larger sample size, greater control (such as in experimental designs), or longer measures to detect the moderating effect of work importance. The data from the current study also suggest that models of life satisfaction would be best served through examination of positive and negative affect. As noted above, the indirect effect of job satisfaction on life satisfaction through positive and negative affect was significant, while none of the moderator analyses were significant.

It is also possible that the null result in the current study may reflect the actual relationship between variables. The only published studies measuring the impact of work importance on the JSLS relationship were unable to show any moderating effect (Rice et al., 1985, 1980). It is also possible that perceiving work as meaningful may impact job and life satisfaction, irrespective of the importance of work. Other studies show meaningful work significantly related to job satisfaction (Kamdron, 2005), well-being (similar to life satisfaction; Arnold, Turner, Barling, Kelloway, & McKee, 2007), and work centrality (similar to work importance; Harpaz & Fu, 2002). Additionally, job satisfaction and meaningful work have been shown to predict life satisfaction (Steger, Dik, & Duffy, 2012). These pattern of relationships suggest these constructs to be related. It is possible that individuals who view their work as meaningful, may see high levels of both life satisfaction and job satisfaction. Stated differently, it may be that meaningful work increases both job and life satisfaction regardless of the importance of one's work role. Alternately, individuals who view their work as meaningful may automatically assume that they are satisfied with their work and life overall because their work is meaningful. If this were true, viewing work as meaningful may restrict the variability in job and life satisfaction scores. The importance of work may not impact the JSLS relationship, since viewing work as meaningful may increase both scores. Future studies would benefit from

measuring work importance, job satisfaction, life satisfaction, and meaningful work simultaneously. Two possible scales to measure meaningful work include the Work and Meaning Inventory (WAMI; Steger et al., 2012) or Comprehensive Meaningful Work Scale (CMWS; (Lips-Wiersma & Wright, 2012). The lack of evidence about moderation also makes it difficult to determine whether adhering to masculine norms can be positive.

There was no data to support positive impacts of adhering to masculine norms in the current study. If adhering to masculine norms strengthened the relationship between job satisfaction and life satisfaction, it would have shown positive impacts of adhering to masculine norms. The data did not support this aim. There was no data to suggest that adhering to traditional masculine norms would be positive with any of the outcome variables measured. The only significant relationship between adherence to any masculine norm and outcomes was the relationship between self-reliance and negative affect. This result is contradictory to the second aim of the study, adding further information that adhering to traditional masculine norms can be detrimental. Given the previous research about positive outcomes related to adhering to masculine norms, it seems the lack of result in the current study most likely relates to the specific included outcome variables. It is possible that adhering to masculine norms may have proved beneficial if measuring adherence to positive outcomes in previous research such as self-sacrifice, being assertive, heroism, courage, altruism, resiliency, or acts of service (Kiselica et al., 2008; Levant, 1992; O'Neil, 2010). While the results of the moderation analysis were unexpected, results regarding adherence to masculine norms conformed to hypotheses.

Adherence to Traditional Masculine Norms

The fourth aim of the study was to gain additional information about how masculine norms would act across sex, ethnicity, and sexual orientation. Unfortunately, there were

insufficient numbers of individuals from non-White backgrounds to conduct analyses by ethnicity. Similarly, the sample did not provide sufficient numbers of gay/lesbian, bisexual, or pansexual individuals to conduct analyses by sexual orientation. The only information that the current study was able to obtain about sexual orientation was that individuals who identified as gay or bisexual reported significantly lower levels of life satisfaction than heterosexual participants. This is unfortunately congruent with previous literature examining adherence to masculine norms, which have samples that are greater than 90% from White ethnic groups and greater than 90% heterosexual (Smiler, 2006). Without further information, it is not clear how gender role norms could interact with ethnic, cultural, or regional norms in the current sample. The results from the current study further underscore the need to intentionally sample groups from non-White ethnicities and sexual minorities, to better understand how these measures operate across identity. Without data to the contrary, it is possible that the "masculine norms" may more accurately reflect dominant, heterosexual, European-American norms which could play out differently in the lives of marginalized individuals. Fortunately however, the current sample was collected to intentionally obtain near equal numbers of male and female participants.

While there was insufficient variability across sexual orientation and ethnicity, there were sufficient numbers to examine adherence to masculine norms by gender. With regard to the overall pattern of scores, this study found results similar to what would be expected according to the gender similarities hypothesis (Hyde, 2005). Differences in scores on adherence to masculine norms were mostly in the small to no effect range in effect size, a few were in the moderate range of effect size, and very few were in the large range of effect size. The current study did find significant differences (varying in effect size) in global adherence to masculine norms, valuing power over women, the use of violence, and value in frequent sex with different

partners outside of relationships. There were no differences on the heterosexual self-presentation subscale, primacy of work subscale. In addition, there were no significant gender differences in work importance, job importance, positive affect, negative affect, education, or satisfaction in life by gender. This is also congruent with the gender similarity hypothesis, in that most psychological variables will show small to no effect size in gender differences. Additionally, the current study showed similarly good reliability estimates (Cronbach's α values range from .78 to .94 across scales for women, .78 to .90 across scales for men), though adherence to masculine norms did not significantly relate to included outcome variables. While the current study may not make significant contributions to scientific literature on the JSLS relationship, the current study does make significant contributions to understanding about adherence to traditional masculine norms by gender.

Although there have been many studies using the CMNI (Mahalik et al., 2003), few have used this scale with women (Parent & Smiler, 2012; Smiler, 2006). Both men and women could endorse or adhere to the specific norms and face similar outcomes from this adherence. The norms were initially selected in designing the scale because men were more likely to endorse belief or adherence to these specific norms, but it does not preclude women from adhering to the same norms. Examining conformity to these "masculine' norms among only men may inadvertently promote the notion that these beliefs are biological and essentialist (male bodied individual must adhere to male gender role), when the literature would suggest otherwise (Addis et al., 2010; Hyde, 2005). Additionally, this may overinflate the impact of adherence to norms, ignoring temporal, cultural, and contextual aspects of gender norms. For instance, there is some evidence to suggest that adherence to masculine norms will vary by region of the U.S. (Levant et al., 1998). Congruent with the gender similarity hypothesis meta-analysis (Hyde, 2005), it is

possible that men and women could show similar patterns of relationships between adherence to masculine norms and outcomes (job satisfaction, life satisfaction, positive affect, negative affect). This is increasingly likely given the results of the current study showing similar relationships between job and life satisfaction, affect and life satisfaction (and similar mean scores on job satisfaction, life satisfaction, and work importance).

Clinical Implications

Results of the current study suggest possible clinical implications for vocational assessments and individual therapy. The current results suggest that job and life satisfaction are strongly related, but the emphasis individuals put on their work role does not seem to strengthen the impact of job satisfaction on life satisfaction. The study also suggests that mood strongly impacts ratings of overall life satisfaction. With regard to job satisfaction being related, this suggests it may be important to evaluate both as part of vocational assessments or individual therapy. Since the value of work importance may not have a strong impact on job or life satisfaction, it may be more valuable to focus instead on other contributors to overall satisfaction with life in vocational assessment or individual therapy. It may be especially important to evaluate baseline levels of happiness and mood and adjust interventions to account for this. With regard to vocational assessment specifically, it suggests the importance of evaluating positive and negative affect when providing instruments measuring satisfaction with work. It is possible that low positive affect and high negative affect might contribute to low ratings of job or life satisfaction. In the reverse, it is also possible that high positive affect and high negative affect may lead to high ratings of job or life satisfaction. Individuals may seek vocational assessment to find more satisfying employment, when missing the actual cause of their dissatisfaction. It would be also important to make recommendations relevant to their baseline levels of positive

and negative affect. For individuals who may have lower baseline levels of mood, it is possible that they may present a low and flat interest profile. It may be useful to pay attention to seemingly small differences as even small fluctuations may be important. With regard to individual therapy, the results of the current study suggest the importance of discussing job satisfaction. Even when job satisfaction may not be a direct focus of clinical concern, it seems that job satisfaction ratings are strongly related to life satisfaction. The results also suggest that it may be possible to improve job or life satisfaction by focusing on current positive and negative affect. It could actually be more impactful to address causes of positive and negative affect than addressing job or life satisfaction directly. The results also suggest the importance of tailoring interventions for individuals who may have typically lower baseline levels of negative affect. Similar to considerations with vocational assessment, it would be important to note even subtle increases in mood as indicators of progress in therapy. Using more qualitative methods of measuring client satisfaction about progress in therapy may also be a better indicator of therapy effectiveness than quantitative measures of mood for these individuals.

One possible domain of implications includes the impact of self-reliance on negative affect, and suggests men and women may equally use these strategies. The current study was unable to find many links between adhering to masculine norms and other variables in the current study, but did show that higher levels of self-reliance predicted increased negative affect. This is perhaps intuitive, suggesting that individuals who feel ashamed to seek help and support are less likely to manage distressing emotion successfully. High self-reliance will likely add barriers towards getting support, validation, and problem solving resources from others in their lives. There is an array of literature showing self-reliance on the CMNI to be related to higher levels of depression, anxiety, and hostility (Mahalik et al., 2003); decreases in body esteem

among female college students (Steinfeldt et al., 2011); and women who rated their male romantic partner higher on self-reliance reported lower relationship satisfaction (Burn & Ward, 2005). The current results regarding self-reliance suggest the importance of addressing values around help seeking, exploring why it makes sense to avoid seeking help, and discussing the negative implications of doing so. It is also important for clinicians to be aware that men and women do not seem to differ in their endorsement of self-reliance (Parent & Smiler, 2012).

It seems individuals who adhere to self-reliance norms may face even greater barriers to seeking therapy, which may be even greater for men. The current study adds to literature suggesting men may have negative attitudes towards help seeking (Hammer & Good, 2010) and face unique barriers towards attending therapy (Addis & Mahalik, 2003; Mahalik et al., 2003). The results from the current study suggest men may be more likely to engage in risky behaviors, attempt to avoid/control emotions, view the use of violence as normative, and have difficulty maintaining intimacy in relationships. It is possible that high levels of self-reliance specifically may contribute to cycles of increased distress and difficulty seeking help. Other authors have suggested that men in particular may feel trapped in cycles, where they experience distress related to adhering to traditional masculine norms, respond with additional isolation and self-reliance, (Mahalik, Cournoyer, DeFranc, Cherry, & Napolitano, 1998), pushing further away from seeking support in therapy or other relationships, perpetuating the cycle. This suggests the need for creative strategies to address barriers to entering therapy and engaging in therapy.

Clinicians should be aware of barriers against attending therapy and progress within therapy. With regard to addressing barriers around entering therapy, Wester (2008) suggested that practitioners working with men may need to frame therapy as coaching, consulting, or other roles that come across more collaborative and unthreatening. Wester continued that men of color

may face additional barriers around lacking role models who have used therapy. Men, especially men of color, are going to be less likely to consider using therapy if it is viewed as a "service provided by [White] women to help [White] women deal with women's issues " (p. 308). It is important for men of color to be exposed to other men of color in therapy, be able to see how therapy could be useful to someone from their background, and be exposed to role models in popular media who hold positive attitudes toward therapy. With regard to considerations once men have started attending therapy, it is important to be able to explore positive aspects related to traditional masculine norms. Other literature note that building on strengths may resonate better with men (Mankowski et al., 2000). Risk-taking can involve self-sacrifice and withstanding hardship for others (Levant, 1992) and self-reliance can be helpful towards building a sense of agency and self-efficacy towards dealing with distressing emotions (Kiselica et al., 2008). Finally, it may be helpful to note that masculine norms are not inherently problematic. Masculine norms seem to be problematic when they are applied rigidly, across context, and do not change with new information (Englar-Carlson & Kiselica, 2013).

Limitations

There are a number of limitations that could impact the validity of the results. The cross-sectional nature of the data makes it unclear how the measured attitudes may vary by context, availability of memories supporting a given belief, or persist over time. With regard to positive and negative affect, it is possible that participants may be falling prey to memory biases such as stability (Kornell, Rhodes, Castel, & Tauber, 2011), retrieval fluency (Benjamin, Bjork, & Schwartz, 1998), or are primed in a way that they make judgments about overall mood based on their current emotional state. With life satisfaction, it is similarly possible that participants may rate overall life satisfaction based on current disposition which could be primed by any number

of factors. Previous authors have noted that fluctuations in mood or general trait levels of positive and negative affect may impact life satisfaction ratings (Pavot & Diener, 2008). The cross-sectional nature of the data also makes it difficult to determine the direction of the relationships found between variables. While there are strong relationships found between job and life satisfaction, it is impossible to determine which is truly the outcome variable. There are similar possibilities with adherence to masculine norms. Previous authors have noted that masculine norms may evolve across time (Parent & Moradi, 2011) and may even vary within ethnic groups by geographical region (Levant et al., 1998). Another possibility is that specific masculine norms (emotional control, self-reliance, primacy of work, playboy) may be a set of coping skills in response to distress or perceived threats against competence. Without longitudinal data, it is not possible to determine whether these results would persist across time. The current study also lacked sufficient variability to explore how adherence to the measured gender norms vary by ethnicity and sexual orientation.

With regard to the impact of self-report questionnaires on gender norms, it is possible that self-reports of adherence may not accurately portray behavior. Gender norms are often conceptualized as performance behaviors exhibited based on context (Cunningham, Domke, Coe, Fahey, & Van Leuven, 2013). This makes it is possible that participants may be responding to the survey based on their attitudes about how they "should" portray their gender, not how they actually act. There may be similar limitations due to using self-report methods regarding work or job importance. It is possible individuals may rate their current job or the work role as unimportant, yet spend more time at work than with their families or friends. Measures of work importance may require measurement of specific behaviors, such as amount of time spent in the work role, making choices between a job and a relationship, or amount of time spent training for

a specific career. It would be important for later studies to better draw from behavioral measures of work or job importance to better answer this question. There may be additional limitations of the current study due to the cross-sectional nature of the data.

Despite drawing from non-student samples which included a large number of female participants, the current study still lacks significant variability by ethnicity and sexual orientation. Previous studies have suggested that that the "masculine norms" used in this study may more accurately reflect, dominant, heterosexual, European-American male norms. It is possible that individuals from non-white ethnicities may have multiple sets of masculine norms to adhere to. For instance, Wester (2008) notes how African-American men may face norms of advancement without collaboration from the dominant White Masculine norms, while also norms suggesting cooperation from Black/African-American norms. Norms suggesting power over women may be incongruent with matriarchal aspects of Hispanic culture (Casas, Turner, & de Esparaza, 2001). It is possible that the adherence to masculine norms may have different impacts based on norms from one's ethnic group. There are similar concerns about lacking sufficient number of gay and bisexual men. It is possible that gay or bisexual men may use rigid presentations of traditional masculinity to defend against questions to their masculinity. Given norms about presenting as heterosexual (Mahalik et al., 2003), it is possible that gay or bisexual men may show high adherence to other norms (primacy of work, emotional control, self-reliance) to feel accepted as a male. It is also possible that they may reject traditional masculine norms due to the lack of inclusion for individuals who do not fit dominant, heterosexual norm. Lacking sufficient variability across ethnicity and sexual orientation leaves many questions unanswered.

Review of Results

With regard to the first aim of the study, the current research replicated previous results showing job satisfaction to significantly predict life satisfaction. Contrary to expectations, none of the proposed moderators had a significant impact on the relationship between job and life satisfaction. The most predictive model of life satisfaction showed job satisfaction to have an indirect effect on life satisfaction, through positive and negative affect. This model accounted for 45% of the variance in life satisfaction. With regard to the second aim of the study, the current research did not show positive outcomes of adhering to traditional masculine norms. The one significant relationship between masculine norms and criterion variables found self-reliance to predict significant increases in negative affect. With regard to the third aim of the study, there were insufficient numbers to explore how the relationship between job and life satisfaction varied across ethnicity and sexual orientation. Although there were insignificant numbers of individuals identifying as gender-queer to do analyses on this group, there were significant numbers to conduct analyses between men and women. Men and women showed similar relationships between job and life satisfaction, similar lack of significant moderation of the JSLS relationship, and affect was an important mediator in the JSLS relationship across both groups. The fourth aim was similarly only able to be partially explored. Although there were insufficient numbers of individuals from non-White, sexual minority, and gender-queer identities, there were sufficient numbers to examine differences in adherence to masculine norms between men and women. Men showed higher overall adherence to masculine norms, as well as higher adherence to specific norms of power over women, use of violence, and frequently changing sexual partners. Men and women did not differ in their value on being perceived as heterosexual. This brings up a number of interesting implications for future research.

Implications for Future Research

The current research bears important implications for the literature regarding the JSLS relationship. One important implication is the need for more complex models of life satisfaction. The most comprehensive model in the current study was able to account for a large effect (45.6% of the variance) in life satisfaction, when looking at the mediating impact of positive and negative affect on the relationship between job and life satisfaction (see figure 1). Previous studies which did not measure positive and negative affect may inadvertently overestimate the true impact of job satisfaction on life satisfaction. Future research would benefit from considering additional contributors to the relationship, as suggested by Lent and Brown (2006). Possible contributors include personality factors (extraversion, neuroticism, conscientiousness), self-efficacy, participation in goal-directed activity, goal and efficacy-relevant resources and obstacles. This research may also benefit from more complex statistical methods, such as multilevel structural equation modeling (Geldhof, Preacher, & Zyphur, 2014; Preacher, Rucker, & Hayes, 2007). This type of model would allow for the examination of multiple mediators, multiple moderators, and interactions among variables. While the current study showed strong relationships between job satisfaction, affect, and life satisfaction, the scope of the current study does not provide data about causality.

In addition to examining more complex models, future research would benefit from examining the causal nature of the relationships between job satisfaction, life satisfaction, and affect. Previous research (Steiner & Truxillo, 1987) proposed the compensatory model and the spillover model as possibilities to explain how job and life satisfaction may impact each other. The compensatory model suggests that negative experiences in one domain enrich deficits in the other. In other words, individuals who are dissatisfied with life may work to increase

satisfaction with work as a way to compensate. The spillover model suggests that satisfaction in one domain will affect the other (positive correlations, where both could cause the other). Given the results from the current study, it would be especially important to better assess the causality in the relationship between job satisfaction, affect (positive and negative), and life satisfaction. It is possible that satisfaction at work causes positive affect, which impacts satisfaction with life. Conversely, it is possible that satisfaction with life causes positive affect, which leads to increased satisfaction with work. Future research would benefit from longitudinal or experimental designs, which would better speak to causality between variables. In addition to information regarding the JSLS relationship, the current study also points to future research regarding adherence to masculine norms.

While helping provide knowledge about adherence to masculine norms among women, future research would benefit from drawing from a broader range of participants and outcomes. The current study was unable to find any positive impacts of adherence to masculine norms. It is possible that these positive outcomes do exist (Kiselica & Englar-Carlson, 2010; Levant, 1992; O'Neil, 2010), such as self-sacrifice, withstanding pain for others, being assertive when necessary, heroism, daring and courage, altruism, resiliency and acts of service. It is also possible that the strength of specific norms may vary by context, such as regional location (Levant et al., 1998). Future research would also benefit from drawing on broader samples. The current study helps to provide information on how men and women compare on adherence to masculine norms, but was unable to draw sufficient numbers of people of color or sexual minorities. As many authors have noted, this is sadly congruent with much of the current literature on masculine norms (Liu & Iwamoto, 2007; Liu, 2005; Wester, 2008). Without data from more diverse samples, it is possible that the "masculine norms" more accurately reflect,

dominant, heterosexual, European-American male norms. It would be important for future research to first assess whether there is similar conformity to various norms by group, while also better exploring how men of color and sexual minority men may have to navigate two sets of norms around masculinity (intersecting identities). As noted above, it would also be important to use measures beyond self-report to gain a more full picture.

Future research should consider designs which weigh behavior and outside raters as complements to self-ratings on attitudes. Previous research (Breiding, 2004) has noted how outside raters may differ from self-report on measures of masculinity. Including outside evaluations of gender role norms and adherence to masculine norms could provide a more complete picture. In particular, this could demonstrate whether adherence to masculine norms would be congruent across relationships and contexts, or the degree to which it may vary.

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APPENDIX A
(Consent Form)

Dear Participant,

My name is Jeff Nepute, M.S. and I am a researcher from Colorado State University. We are conducting a research study on the impact of adhering to masculine norms on the relationship between job satisfaction and life satisfaction. The Principal Investigator is Bryan Dik, Ph.D. and the Co-Principal Investigator is Jeff Nepute, M.S. from the department of Psychology.
You are being asked to fill out a series of questions about your job satisfaction, life satisfaction, importance of work, and adherence to specific beliefs. The current study aims to explore different factors which may impact the relationship between job satisfaction and life satisfaction, and how these relationships vary by sex, sexual orientation, and ethnicity. Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participation at any time without penalty.

No identifying information will be gathered from this survey, all responses will only be reported in aggregate, and only the researchers will have access to the responses you provide. You will be provided $1.00 as compensation for your participation. While there are no additional direct expected benefits of participation, the results of the study may provide information about how adhering to certain gender norms may strengthen the relationship between job and life satisfaction.

There are no perceived psychological risks from the current study. It is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known and potential, but unknown, risks.
If you have any questions, please contact Jeff Nepute at jeff.nepute@colostate.edu or Bryan Dik at Bryan.dik@colostate.edu. If you have any questions about your rights as a volunteer in this research, contact Janell Barker, Human Research Administrator, at 970-491-1655.
If you would like to proceed with the survey, click the link below to begin. At the end of the survey, you will be returned to AMT for payment.

Sincerely,

Bryan Dik, Ph.D.
Principal Investigator

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Click here to take the survey.

APPENDIX B
(Questionnaire)

Minnesota Satisfaction Questionnaire (Short Form)

On this page, you will find statements about your present job. Please read each statement carefully and decide how satisfied you feel about the aspect of your job described by the statement.

You will rate items from very satisfied to very dissatisfied

Very dissatisfied	Dissatisfied	Neither Satisfied nor Dissatisfied	Satisfied	Very Satisfied
1	2	3	4	5

In my present job this is how I feel about:

1. Being able to keep busy all the time
2. The chance to work alone on the job
3. The chance to do different things from time to time
4. The chance to be "somebody" in the community
5. The way my boss handles his/her workers
6. The competence of my supervisor in making decisions
7. Being able to do things that don't go against my conscience
8. The way my job provides for steady employment
9. The chance to do things for other people
10. The chance to tell people what to do
11. The chance to do something that makes use of my abilities
12. The way company policies are put into practice
13. My pay and the amount of work I do
14. The chances for advancement on this job
15. The freedom to use my own judgment
16. The chance to try my own methods of doing the job
17. The working conditions
18. The way my co-workers get along with each other
19. The praise I get for doing a good job
20. The feeling of accomplishment I get from the job

Conformity to Masculine Norms Inventory (46 item short form)

The following pages contain a series of statements of how people might think, feel, or behave. ***Thinking about your own actions, feelings, and beliefs***, please indicate how much you personally agree or disagree with each statement by answering from "Strongly Disagree" to "Strongly Agree." There are no right or wrong responses to the statements. You should give the responses that most accurately describe your personal actions, feelings and beliefs. It is best if you respond with your first impression when answering.

Strongly Disagree	**Disagree**	**Agree**	**Strongly Agree**
0	1	2	3

1	In general, I will do anything to win.	
2	If I could, I would frequently change sexual partners.	
3	I hate asking for help.	
4	I believe that violence is never justified	
5	Being thought of as gay is not a bad thing	
6	In general, I do not like risky situations	
7	Winning is not my first priority	
8	I enjoy taking risks	
9	I am disgusted by any kind of violence	
10	I ask for help when I need it	
11	My work is the most important part of my life	
12	I would only have sex if I was in a committed relationship	
13	I bring up my feelings when talking to others	
14	I would be furious if someone thought I was gay	
15	I don't mind losing	
16	I take risks	
17	It would not bother me at all if someone thought I was gay	
18	I never share my feelings	
19	Sometimes violent action is necessary	
20	In general, I control the women in my life	
21	I would feel good if I had many sexual partners	
22	It is important for me to win	
23	I don't like giving all my attention to work	
24	It would be awful if people thought I was gay	
25	I like to talk about my feelings	
26	I never ask for help	
27	More often than not, losing does not bother me	
28	I frequently put myself in risky situations	
29	Women should be subservient to men	
30	I am willing to get into a physical fight if necessary	

31	I feel good when work is my first priority	
32	I tend to keep my feelings to myself	
33	Winning is not important to me	
34	Violence is almost never justified	
35	I am happiest when I'm risking danger	
36	It would be enjoyable to date more than one person at a time	
37	I would feel uncomfortable if someone thought I was gay	
38	I am not ashamed to ask for help	
39	Work comes first	
40	I tend to share my feelings	
41	No matter what the situation, I would never act violently	
42	Things tend to be better when men are in charge	
43	It bothers me when I have to ask for help	
44	I love it when men are in charge of women	
45	I hate it when people ask me to talk about my feelings	
46	I try to avoid being perceived as gay	

Job and Work Importance Questionnaire

1 Strongly disagree	2 Disagree	3 Somewhat Disagree	4 Somewhat agree	5 Agree	6 Strongly agree

1	The important things that happen to me involve my present job	
2	To me, my job is only a small part of who I am	
3	I am very much involved personally in my job	
4	I live, eat and breathe my job	
5	Most of my interests are centered around my job	
6	I have very strong ties with my present job which would be very difficult to break	
7	Usually I feel detached from my job	
8	Most of my personal life goals are job-oriented	
9	I consider my job to be very central to my existence	
10	I like to be absorbed in my job most of the time	
12	The most important things that happen in life involve work	
13	Work is something people should get involved in most of the time	
14	Work should be only a small part of one's life	
15	Work should be considered central to life	
16	In my view, an individual's personal life goals should be work-oriented	
17	Life is worth living only when people get absorbed in work	

Positive and Negative Affect Scale (PANAS)

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you ***have felt this way during the past few weeks***. Use the following scale to record your answers.

1 Very slightly or not at all	2 A little	3 Moderately	4 Quite a bit	5 Extremely

1	interested	
2	distressed	
3	Excited	
4	Upset	
5	Strong	
6	Guilty	
7	Scared	
8	Hostile	
9	enthusiastic	
10	Proud	
11	Irritable	
12	Alert	
13	ashamed	
14	Inspired	
15	nervous	
16	determined	
17	attentive	
18	Jittery	
19	active	
20	afraid	

Satisfaction with Life Scale

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

1	In most ways my life is close to my ideal.	
2	The conditions of my life are excellent.	
3	I am satisfied with my life.	
4	So far I have gotten the important things I want in life.	
5	If I could live my life over, I would change almost nothing.	

Demographic Information Form

Gender:

Male	
Female	
Queer/Androgynous	
Other (please specify)	

Ethnicity:

White/Caucasian	
Hispanic/Latino	
Asian American/Pacific Islander	
African American/Black	
Biracial/Multiracial	
Arab American/Middle Eastern	
American Indian/Native American/Alaska Native	
Other (please specify)	

Age:

_____

What do you think your total income was last year for yourself and your immediate family before taxes?

_____

What is your highest level of education?

6 years or less	
Some high school	
Completed high school or high school equivalent	
Some college	
Completed college	
Some graduate or professional school	
Completed graduate or professional school	
I don't know	

Father's Highest level of education?

6 years or less	
Some high school	
Completed high school or high school equivalent	
Some college	
Completed college	
Some graduate or professional school	
Completed graduate or professional school	
I don't know	

Mother's Highest level of education?

6 years or less	
Some high school	
Completed high school or high school equivalent	
Some college	
Completed college	
Some graduate or professional school	
Completed graduate or professional school	
I don't know	

Sexual orientation:

Heterosexual	
Lesbian/Gay	
Bisexual	
Other (please specify)	